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ABSTRACT

This resource book is intended to help trainers working on postliteracy programs in agricultural areas of West Africa. Its primary focus is on the role of literacy in the management of irrigation systems and farmer cooperatives and on program administration activities such as recordkeeping, registration, and credit. However, strategies for meeting the specific training needs of other groups, such as women's cooperatives, vegetable growers, and youth associations, are also examined. The format of sections introduced by a story is used to demonstrate the importance of storytelling as a media for disseminating information in West Africa. The following topics are examined in the book's main sections: the role of literacy in agricultural development, designing a postliteracy course, planning a lesson, organizing learning activities, making and using materials, and village projects. Appended are the following: a short course in blackboard drawing; games for literacy and numeracy; and instructions for making a rod puppet, binding books, a freestanding flipchart; and examples of account sheets used by farmers in Senegal. (MN)

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Reading, writing and cultivating

A resource book for post-literacy trainers based on experiences in Senegal

Juliet Millican | Illustrations by Jan Stephens

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Juliet Millican
Post-Literacy handbook

Reading, writing and cultivating

A resource book for Post-literacy training based on experiences in Senegal.

To the memory of my father

With thanks to Samba Diallo and to
the alphabetiseurs working on
Ile a Morphil in 1986-1988.
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1. Introduction

1.1 How this book came about - a story

In 1986 a young woman went to Senegal to work on a literacy programme. The programme, in the North of the country was part of an agricultural project and based in a very rural area, a long way from the town and largely cut off from many of the main lines of communication. The participants of the programme were mainly peasant farmers whose lives were centred around village communities and traditional agriculture.

The area was bordering on the desert, the desert itself was spreading, and a decade earlier rains had begun to fail and drought had hit hard. The droughts had inevitably led to frequent crop failure and, in order to help insure a more constant food supply, the government had begun to introduce irrigation.

The agricultural project where the young woman worked had been set up to construct irrigation schemes for rice growing. Change had already begun to happen in this rural area. Previously farmers had been dependent on the rains and the flooding of the river for their annual cultivation of subsistence crops. Irrigation had introduced a new element of control.

On top of this an international decision was made to construct two dams in the Senegal river, one in Mali, at Manantali, and one in Senegal, the Diama dam, close to St Louis. These decisions, made a long way from the rural communities on the river banks, would none the less, severely affect their lives. No longer would agriculture be dependent on the rains and the seasons, but water would be regulated and artificially controlled.

The government, with internal organisations and overseas help, then set about teaching farmers how to cultivate in this new way. Initially they were given a lot of help, - the new materials they needed were supplied, farmer's advisors were employed to work with them in the fields and show them what to do, and the cost of running these systems could be paid off - after the harvest - with rice. The farmers therefore had some time to adapt from their traditional, family centred system of cultivation to these new methods of working together in a larger group. But, after a time, the whole operation not only became too expensive for the government to support, but the farmers began saying 'we want to be more independent, and more in control of what we grow, as we were before'. Running an irrigation system meant a complex series of new tasks, many of them involving money.

While their fields were being 'managed' by someone else, the farmers remained in danger of being exploited as measurement, costing, weight and calculation were something few of them understood.

The government as part of their policy of withdrawal, began to encourage farmers groups to become more independent and to organise themselves. Organisations like 'co-operatives and 'groups d'interets economiques' were talked about and literacy programmes were started in order to introduce 'management' to the people themselves.

The literacy programmes, like many throughout West Africa, aimed to teach the alphabet in the local languages. A 'syllabaire' was printed using a whole series of themes and introducing a new letter on every page, and a numeracy book was produced to teach basic number work.

Literacy Teachers - mainly people from village backgrounds with a secondary school education were recruited and specially trained by a local organisation to work with the syllabaire. Classes were set up throughout the area in villages that felt they were ready to take on a literacy centre.

This was about the time that the young teacher at the beginning of this story arrived. Her arrival was prompted by two things. The first, - the local teachers, who had been very well trained to teach the alphabet and work with the syllabaire, had, after eight months, come to the end of it and were beginning to say 'what comes next?'. The second, - the government decided to completely withdraw from providing inputs, on credit to the farmers. In order to cultivate at all using the irrigation schemes that had been constructed the farmers needed to organise themselves, obtain credit, understand it and learn how to pay it back.

Consequently the need to learn to read, and calculate, suddenly became very linked up with the cultivation of food, and therefore survival.

When the young woman arrived in Senegal she found a group of people who were already becoming aware of what literacy is. She also found a group of literacy teachers who, after a years experience, were committed and enthusiastic and anxious to learn more.

She worked with them through two seasons, and together through discussion and experimentation they looked at many ways of learning. They tried to question why rural people needed to be literate, what tasks they would have to carry out in order to manage themselves, when they would have to do them and how best they could be helped.

Eventually they decided to record all their ideas in a book, not only to help insure that they, as teachers at post-literacy level would remember and use them. But in the hope that they might be useful to other people with similar problems in neighbouring areas.
Here they are.

Good Luck!

1.2 Some Background to Literacy Training

During the 1950's and 60's there was a growing awareness throughout the world of the fact that large numbers of people were unable to read and write. It was felt that literacy itself was important in the development of a community and UNESCO began a large number of literacy campaigns in the developed and the developing world. The aim, in planning many of these campaigns, was that improving literacy would help improve production and therefore the economic situation.
Many of these programmes were, however, unsuccessful. It was apparently very difficult to convince people of the importance of something that, traditionally, their ancestors had never needed.
Although people were often enthusiastic at the start of a programme in many places there was little use for literacy in the immediate environment. The enthusiasm therefore came from the outside, the managers and planners who said literacy would be useful. That use was not felt.

During the 1970's a Brazilian educator, Paulo Freire, challenged UNESCO's approach. He felt the importance of literacy lay, not in training people to be better producers, but in making people more aware of their own situation. He felt that it was only through awareness that change became possible. He looked, not only at the social group but at the individual and at the personal benefits of education.
Freire set out a new approach to the teaching of literacy based on the discussion of social problems. Instead of 'giving' people information he encouraged students to question and discuss the things they saw around them. He proposed that classes should begin with social and emotive issues in order that students might develop a greater awareness of themselves and their ability to influence the world around them.
Freire, among others, helped to bring about a change in the way we see education. The teacher is no longer the expert who supplies the information but the group leader who helps students to question things for themselves.
Freire called this process 'conscientization' or awareness raising, and his method of beginning with a picture for discussion, moving on to a phrase and then to a letter, is the basis for many literacy programmes today. He provides a 'method' for learning letters, which begins with the known and the important and moves on to the unfamiliar and the new. He also drew attention to how teachers can affect the way their students think. He changed the emphasis from what was being taught to what people wanted to learn, and the importance of making people aware of their own strengths and value. Writing initially for farmers in Brazil his methods had a political significance. He taught skills of reading, writing and self-confidence in order to help the poor become more equal to the rich.

Freire's methods were successful because he began with what was important to the lives of the people in his classes and treated students as equals. He realised the biggest problem for many of his students was not learning the alphabet or recognising letters but overcoming the feeling that they were too ignorant to learn. He used techniques of question and discussion to bring out what people knew, and built on that, rather on than rote-learning to feed in new or unfamiliar ideas.
By making people more aware of their own lives, he encouraged them to think and act to try to improve them.
Freire was sent into exile from his native country Brazil because many of his ideas were a threat to the government. He was actively encouraging people to take more control. However, in West Africa during the 1980's many governments began to encourage people to organise themselves on a local level. The lessening of government involvement in agricultural production and the withdrawal of many governmental organisations is part of a process of 'responsibilisation'. Farmers themselves are becoming more responsible for their own food production without the provision of government subsidies or credit. Because of developments in agriculture, and in many areas the introduction of irrigation, this entails farmers groups also becoming responsible for many of the administrative tasks involved.
Responsibilisation has had its own effect on literacy. The ability to read, write and calculate is no longer an innovation from outside aimed at

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improving production, not principally a way of raising social or self awareness. It has become a tool that is necessary in order to function as a peasant farmer in a rural area.
Farmers no longer need to be 'sold' literacy. Many farmers groups are now demanding the right to learn in order that they can function independently. There is a new importance placed on being able to understand the economics of production in being able to calculate and budget, and decide when and whether to sell grain.
The methods of literacy teaching that have evolved since Freire and the programmes that have been started provide a valuable first step towards the aim of independence. Freire talked about helping students to overcome the feeling that they were too ignorant to learn. On overcoming that there is the second and larger problem of helping people to incorporate that learning into their lives.

1.3 From Literacy to Post Literacy

Post-Literacy is a very broad and widely used term. It covers everything that comes after literacy, everything that helps people to use that skill as a tool, to improve not only their own production and therefore their finances, but every aspect of their lives. What these issues are, and what students want to learn will therefore differ from place to place.
There are a number of techniques that have been adopted by many literacy teachers in order to help students read. The variation in skills developed after reading, however, involve a variation of new, and often different techniques. Trainers at post literacy level, therefore, need to be more flexible and experimental in order to adapt and plan their courses with their own students in mind.

This book is aimed at helping trainers working on post-literacy programmes in agricultural areas of West Africa. It is concerned particularly with the use of literacy in the management of irrigation schemes and farmers co-operatives, dealing with record keeping, registration and credit. But it will also look at other groups, - women's co-operatives, vegetable growers and youth associations within the same area.
Much of the more general information can be applied to literacy and post-literacy training everywhere, and can be adapted for use on different programmes.
It is intended as a resource book of ideas and materials that can be used by the trainer as a guide. It is not an instruction book nor does it hold all the answers. It is a record of ideas used within one programme that might be adapted for use elsewhere.
And it is intended as a support for the trainer working in isolation - a long way away from his or her colleagues, from books or resources or supervision.
It offers some help through the maze of what 'post literacy' can be to show how students can be involved in making it what they want it to be. It suggests different teaching techniques to deal with the different things that need to be learnt, and demonstrates how materials can be produced from the minimum of equipment in the remotest of areas.

We have used the format of sections introduced by a story to demonstrate the importance of story telling as a media for information in West Africa. We have used pictures and diagrams to illustrate the use of visual aids as well as to make our own meanings clear.

Throughout we encourage trainers to look to their students for an evaluation of their training and to use their comments in future planning. It is only the users, after all, who can really judge if what they've been given is useful or appropriate. In the same way we encourage readers to send their comments on what in this book has been useful and what they've found to be missing. It is only with that information that we can re-plan the ideas we've put forward, and improve them in the future.

2. The Role of Literacy in Agricultural Development

2.1 The Story of Ali - a warning

Last year, in a village quite near here, a literacy teacher was sent to set up a class. His name was Ali. The villagers welcomed him warmly. They liked his good humour and his enthusiasm and felt he would make a good teacher. Both men and women came regularly to his classes which always began with a lively discussion about rice growing, budgeting or preparing food. Things seemed to be going well. Ali worked hard, he was a good teacher, he was also very proud.

One day, during a class discussion a student, Ibrahaim, asked a question about repairing a crack in an irrigation canal. There were cracks appearing in the canal next to his field. Ali wasn't really sure what the solution was but, realising his students thought highly of him, was reluctant to admit he didn't know. Ali, as I said, was very proud. He thought for a while about everything he'd ever heard about the maintenance of canals and made up what seemed to be the right answer. Pretending a confidence he didn't really have, he answered Ibrahaim, and Ibrahaim agreed to carry out the repair, he trusted that Ali was right.

A couple of days later Ibrahaim was in his field trying to repair the canal in the way Ali had told him without much success. The farmer's advisor walked by and saw what he was doing. 'Hey, Ibrahaim,' he said when he had finished his greetings, 'that won't help at all, what are you trying to do?'. Ibrahaim explained what had happened in class. The farmer's advisor smiled. 'No' he said,' this is how you repair cracks in a canal', and he showed him a completely different way.

Now Ibrahaim was confused. Ali, the literacy trainer - his teacher whom he liked and trusted, told him one thing, the farmer's advisor whom he'd known for a while, told him another. He didn't know what to do, so in the end he did nothing. The cracks in his canal grew worse and worse.

A week later it was so bad that Ibrahaim decided to travel into the town and see the manager of the region, hoping he would be able to solve the issue. So he saddled up his donkey and set out. The journey took him half a day. When he arrived he was hot and tired, but the manager agreed to see him and Ibrahaim presented his problem. The manager gave him the answer quite simply: it was as the farmer's advisor had told him. Ali had got it wrong. Ibrahaim then rested before returning by donkey to his village. When he arrived it was already dark, so he couldn't begin to carry out his repairs before the following day. By this time the cracks had grown so large that, although the repairs worked, they took a lot more time and a lot more work before the canal was strong again. And, because of the work involved, the whole village soon got to hear of what had happened.

Ali continued to work as a literacy teacher in the village, and Ibrahaim continued to come to his classes. But some of the students decided they wouldn't go any more and even those who did never knew when to believe what Ali was telling them.

Ali, because of his pride, had suddenly lost their trust.

This story raises many questions, for example:

a) what is the role of the literacy trainer ?
b) how much agricultural and technical information can be given or discussed in a literacy class ?
c) how much does a literacy trainer need to know about agriculture and irrigation ?
d) what is the best thing to do when someone asks a question you can't answer ?

Try and answer some of these issues for yourself, in view of the story and its simillarity to your own situation.

2.2 The Post Literacy Trainer

Traditionally, 'teachers' in African society are the eldest people in the village. They **know** the most because they have had the most experience of life. They have therefore earnt their position and deserve respect.
Changes in agricultural development have meant the introduction of things which older people have not always experienced. In these new situations they may not have the most knowledge. From time to time elders are now in a class asking questions to a much younger trainer. They themselves are not too ashamed to say 'these things are new to me. I don't know them, and therefore I am here to learn'.
Ali lost the respect of his village because he pretended he knew something he was unsure of.
The role of a village trainer is a new and strange one. At a young age you may be in a position of giving information to the elders. It is a position not to be misused.
In a school class room the teacher has the advantage of age, and usually knowledge over the children. In an adult class the trainer has the advantage of some knowledge, but by no means all. About many things, - rice farming, the seasons, crop diseases and life itself, the students will often know more. About some things no-one in the group will be informed.
As trainers, what we need to be good at is **working with people**, helping students to share, to understand and to use whatever information is available.

It is perhaps:

– *more helpful* to see ourselves not as *teachers* or givers of knowledge, but as *communicators* or sharers of knowledge;

– *more helpful* not to try to *learn* all the answers, but to *practise* encouraging students to search among themselves for their own solutions, and, where answers are missing, to know where to go for help;

– *most useful* – not to just listen to the problems and grumbles of the farmers, but to communicate those problems to the people who may be able to do something about them,- the farmer's advisors, the manager of the region or the project staff.

By becoming a good Communicator a trainer can help keep information moving between the people who need it most.

A good group leader:
– will not dominate the class by talking about what they know,
but
– through question and encouragement will help the group to share the knowledge it has and try to apply it,

– will not try to impress the group with complicated explanations or language that is difficult to understand
but
– will use familiar terms and local examples to help make new information clear,

– will not just listen to problems and keep that information to themselves
but
– will try to help the group to take that problem to someone who may be able to solve it,

– will not pretend knowledge that she doesn't have
but
– will say 'I don't know, but I can find out for you and will tell you soon'.

No-one knows everything, except God
Use the knowledge you do have, to find out that which you don't.
– GO FOR HELP.

2.3 Irrigation and Responsibilisation

The introduction of irrigation as a system of agriculture brought many changes into the lives of rural people. Farming was no longer a matter for the **family** but involved the **community**, or larger group. Production was on a larger scale and needed to be **managed**. Fertilisers and pesticides were used and had to be **bought**. A motor pump needed someone to **maintain** it and oil, fuel and spare parts to help it run.
Because this introduction came from outside, the organising and managing was, in many cases, run from outside the village too. People did not come to see it as something entirely of their own. Most of the official transactions or legal processes involved, such as contacts and invoices, were carried out in French, and therefore could not be understood by most of the farmers themselves.

The *advantages* of management from outside are:

- in many cases it is easier;
- management is done for you, limiting the tasks you have to do yourselves,- like the buying of inputs or the selling of your crop;
- there is some security in advice given by 'experts', who may be more in touch with up-to-date information on cultivation techniques, new crops, new varieties, markets etc.

The *disadvantages* of management from outside re:

- the constant feeling that you are working under someone else's direction, which limits freedom and responsibility;
- the risk that the managers may take an unequal share of the profits;
- decisions are taken which are out of your hands with regard to which crops to grow and when, etc.

The government policy in many places is now changing to be one of Responsibilisation, - of making rural people more responsible for their own livelihood. The issue of responsibilisation in irrigation is one of the main forces behind many literacy programmes.
It is worth examining very closely what 'responsibilisation' means.

To give responsibility to someone;
To allow someone to take responsibility;
To teach someone what they need to know in order that can **become** responsible for themselves.

For example,-

A baby is very dependent on its mother, she will carry it with her almost all the time.
A child is still very dependent on the family and other adults for food, shelter and guidance.

An adolescent learns to do many things for him or herself.
It will begin to question what it have been taught as a child, to spend more time alone away from the family, or with other people the same age.
A young man or woman, at a certain age begins to make decisions for themselves. They may form groups or associations that are separate from the family group they grew up in, they move away to work in another town or village, they may decide to marry and have children of their own.
These persons have now become responsible for themselves.

In order for a group of farmers to become responsible for their own production and to operate without assistance from outside there are a number of things they need to **know**, and a number of new **skills** they need to **acquire**.

2.4 The Development of Co-operatives

In order to take on the task of managing, many farmer's groups are forming themselves into co-operatives (sometimes called 'Group d'Interet Economique', or 'Section Villageoise'). These are legal organisations which are recognised nationally and have laws and a constitution of their own. The co-operative can then open a bank account, borrow money or trade.
Co-operatives are used around the world where people want to control their work and lives, create their own opportunities and improve their standard of living.
The main aim in a worker's co-operative is to create a profit or a surplus to improve the living standards of all the people involved. This is different from groups or businesses that are owned and managed from outside where the main aim is to create wealth for the owners and not necessarily for the workers.
Co-ops use many different legal structures depending on what best suits their needs, but the business is always owned and controlled by the workers.
Within such organisations are certain positions, - president, treasurer, secretary, - which are elected by the members of the group. Every member has one vote.
However it is the *principle* of a co-operative that everyone also understands and has some say in the way things are run. In order to do this, and to be in a good position to judge **who** to elect, it is important that a large number of members can read and understand the rules relating to the co-operative they form. When only a few people can read them they can control what the other members know.
When a co-operative is set up and running, there are a number of records that need to be kept regularly so that amounts of money, stocks and supplies are not mislaid. A co-operative must be responsible for the things it owns, for these in turn are the property of its members. It is not sufficient for someone to *remember* what has been spent and what is owing.
The first record that must be kept is a *list of members* and the *subscriptions* they have paid.
Buying inputs as a group is cheaper and easier than buying them individually. If the co-operative **buys** the inputs needed by everyone, these too will need to be recorded, - *the money spent, the amount received, and how much everyone has used.*
Some co-operatives agree to buy back surplus

nce from individual members, to store it and then to sell it in bulk. This too all needs to be written down.
Although at the moment most official banks still only deal with French, - or the official language of the country, - if all records relating to the co-operative are drawn up and kept in the language of the community, - then that information is available to everyone in the co-operative who can read.
When more than just a few members can read and write and calculate and understand the records, then more than just a few people can be really involved in what is going on. The co-operative becomes more fully a co-operative, run - not by the government, nor by a project, nor just by the village leaders, - but by the members themselves.

2.5 Learning through Literacy

Another justification for the management of local agriculture by outside organisations, was the frequent changes and developments in agricultural production. Peasant farmers did not have access to up-to-date information on the best types of fertilisers available, how and when to apply them, new seed varieties and amounts of water they needed, - irrigation was a relatively new technique.
When people have learned to read, reading becomes a tool which can be used to learn more about other things. It opens up a whole new area of information.
A non-literate farmer is dependent on what he **hears** and **sees** for new information, he can learn only about that with which he has direct contact. A literate farmer can learn about whatever he is able to read, the area from which he can gain new information is increased.
A literacy trainer can help people learn more about new farming techniques by:

- organising classes around themes that students want to discuss more fully;
- inviting technicians or farmer's advisors to come into the class and talk to the group;
- helping to organise demonstrations or visits to areas where new varieties or techniques are being tried out so people can see for themselves and make comparisons;
- translating relevant material into the local language so that people can **read** about it;
- encouraging students to *question* and *discuss* what they have learned, so they can decide what works best for them.

Though this book is concerned mainly with the importance of literacy to agriculture, when people have learned to read and to question, they have access to information that relates to every aspect of their lives.
A literacy trainer can make that information available, and encourage people to use it.

Literacy provides the TOOLS to learn more and the SKILLS to question: - what do I want?, how can I get it?, and how will having it improve my life?

Above all, a farmer's group needs to understand and believe that organisation is something they can do for themselves.

If a mother carried her child on her back throughout it's life it would never learn how to walk.
At a certain stage the mother says: here, you must try yourself, I will guide you all I can but you must stumble and fall until you can do it alone.

2.6 Literacy and Extension

Some Literacy Trainers, particularly those working within rural projects, will find that some of the issues covered in this book are the responsibility of the extension worker.
A post-literacy course dealing with basic education and problems of farming and self-management will inevitably overlap with farmer's advisors or technical agents working within the field.
If relationships between literacy trainers and extension workers are *good* this overlap can be an advantage, reinforcing what each of them has said by *duplicating* information.
If relationships between the two groups are *bad*, it can easily become an area for conflict.

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This is how we see it.

An extension worker receives an agricultural or technical training. His knowledge of farming methods will probably be greater than that of the literacy trainer. He is a *source* of advice and a *resource* for the literacy team.
A literacy or post-literacy worker receives a training in teaching and communication skills. He will be in regular contact with farmers who see their extension worker periodically.
Post-literacy training is therefore an important *tool* that the extension worker can use, to convey information to the farmer, to support information already given, and to check whether that information is understood and used.
If both groups are to gain from each others experience, regular meetings between the two are essential. The extension worker should be involved in the planning of a course and in providing support for new information given in a class. The literacy trainer should be informed of any changes taking place within the project and in the field.
Clear guide lines should be laid down between the two groups concerning *who* is doing *what*, and *when*.
When literacy trainers are working alongside extension workers careful planning of a course becomes all the more important.

Literacy trainers and extension workers are part of the same team and need each other, they are both working with the same groups of people towards the same goal.

2.7 Some Conclusions

The following chapters of this book contain ideas and information for helping farmers to learn and practice what they need to know in order to be their own managers and to run co-operatives effectively.
If they are to *believe* in their ability to organise and direct, they need to be given responsibility right from the beginning. That means taking responsibility for the learning process too.
A literacy trainer who tries to constantly control a class and keep too rigid a structure takes that responsibility away. He is saying, as so many people have said before, 'I am in charge and therefore I will tell you what to do'.
Farmers know, through years of experience, the problems of cultivation, and the 'gaps' in their own understanding.
Students, through literacy classes, will have learned the skills involved in literacy and numeracy, - which they find difficult and which they need to practise more.
By involving the class in choosing the themes they want to explore on a post literacy course, the skills they want to practise and the tasks they want to learn, they are, at the same time, gaining experience of managing themselves.
For all these reasons the role of a post-literacy trainer differs from that of a teacher in a school. Within a co-operative every worker is important and has a part to play in its management as well as a share of the profits. The president of a co-operative is elected by its members to oversee management duties and to ensure that everyone works together.
Similarly, in a post-literacy class the trainer is there to work with and for the members of the class. His role is to ensure everyone works together to share their ideas and to participate in the management of the course. His task is to oversee that management, to encourage people to listen to each other and to search for their own solutions.
Our aim is to create in a post-literacy class a microcosm or a practice area for the new world of literacy. Roles can be taken on, conflicts played out and situations set up in which the transactions of management need to be carried out. Mistakes can be made without fear of the consequences. People can learn to work together without the help of a trainer and with the information they have, and evaluate their results together.
A learning group should be both supportive and exciting, informative and experimental, a place where all the stumbling and falling can be worked out until the group can, with confidence, run on their own.

3. Designing a Post Literacy Course

3.1. Mamadou and Hamidi - or 'how not to do it'

Mamadou and Hamidi were literacy trainers in a rural area. They were both reasonably good at their jobs, though Mamadou had had a lot more experience than Hamidi, and was, therefore, a lot more sure of himself. Having worked on three different programmes for three subsequent years within the same area, he was confident that he knew both his students and his job.
Hamidi, on the other hand, had only one year experience in a programme on the outskirts of Dakar. His first year had been successful, he had achieved good results but when the programme was closed down due to lack of funds, he decided to return to the area where he was born. He had left his village at the age of eleven, to go away to study at secondary school, and when he returned he found that most of his friends had either left or were married and working as farmers themselves. He realised how different he had become in his own life from the people he had grown up among, and was not at all sure he now fitted in.

However, as both Mamadou and Hamidi had a certain amount of experience, they were both re-employed with very little preparation on a post-literacy programme in two neighbouring villages.

Mamadou approached his work with the self-confidence he had developed during the previous three years. All his former classes had gone well, he knew the syllabus and how to teach it almost backwards. He knew the area and the people who lived there like the back of his hand. He went into his first class with very little thought about what they would do there. As a literacy teacher he had given up planning after the first year and this was, (he thought) more or less just a continuation of the same thing. Consequently, although he organised his class at eight in the evening when he knew most people would have finished eating and were able to come, he found himself in the middle of a class of people not knowing what to say.
In the past he had worked with a syllabus, but then the class already **knew** all the letters from the syllabus. Before he had used a set of pictures to generate discussion, but the pictures he **had** they had all seen. He began by revising multiplication and division but found he had no chalk to write with and the blackboard was broken, and, after the long break since the last class, many of the students arrived without slates, paper or pens.
Halfway through the class Mamadou began asking himself why things seemed to be falling apart and what he was supposed to be doing there anyway.
Hamidi's experience was quite different. He spent the week before the first class worrying about what he was going to do and trying to remember everything he had learned in Dakar. He sent a message round to say the class would be held in the morning as he knew the early part of the day was the best time for learning, before the mid-day sun and when people were still awake and fresh. He made sure the centre was clean and swept, that he had chalk and spare pens, and that the blackboard was in good repair.
He wrote out a full programme of study, looking at some of the things he had taught in the past,- understanding a street map, contracts of employment, budgeting the weekly income. His previous programme, in a textile factory, had produced a number of written texts of which he still had copies. He decided to use them as reading material for the first class.
Hamidi tried very hard, but unlike Mamadou, he

was over-prepared, and his preparation was inappropriate. The morning **is** a good time to learn, but in the rural area where he worked the men were away in the fields and the women were occupied in preparing food, so almost nobody came to his class. His lessons were well thought-out, but nobody in his class was **in** employment, so knew nothing of contracts or a weekly income. The texts he produced concerned the manufacture of textiles and words describing machines and processes the students had never heard of. The few students who did come to the class were confused by what Hamidi said and therefore found him difficult to understand. Halfway through his second class Hamidi's confidence dwindled even further when he realised his students weren't listening to what he was saying. He began to ask himself what he was doing wrong.

Before continuing ask yourself the following questions:

Do you relate to Mamadou or Hamidi?

Why is it they both went wrong?

What lessons can be learned from their experiences?

What could they have done to avoid this situation?

3.2 The Need for Planning

A post-literacy course will probably follow after a literacy course taught in the same area. The structure for running such a course will therefore already exist. In most cases a centre will already be established with both a literacy committee and basic materials. However it is important to remember that this is a **new** course, and is to be taught in a new way.

The existing structure needs to be revised as teaching methods are re-thought. The timing of the class and the aims of the course may well have changed and different materials will be needed.
Many literacy programmes use the system of one teacher one village. A literacy teacher will therefore live in the village for which he is working for the duration of the course.

At post literacy level the format is usually different.
The examples we have seen are:
a) short intensive courses
b) one tutor working in several villages and giving weekly classes in each.

It is generally felt that when people have learned the basics of literacy it is not necessary to have a professional teacher living in the village giving classes every day.

The advantage of short intensive courses is the interest that can be generated by working together intensively for a limited period. It means the trainer travels periodically rather than weekly, and need not have a personal means of transport.

The advantage of weekly meetings is that regular, on-going classes make it easier to construct a course that is part of people's lives.

Trainer-led Groups The decision of how often and when to hold classes can only be made with the needs and activities of the students in mind, and arranged around the cropping calendar.

what are the principal activities?
when are the students free?
will they be tired, hungry, or rested and ready to learn?
how much and how quickly do they need to learn?

Between trainer-led sessions students should be encouraged to meet on their own in reading or group-led groups.

Group-led groups are important in incorporating literacy into village life and reducing dependence on the trainer. The trainer can help by setting the group tasks to work through on their own and helping to set up village projects. (see 7. Setting up Village Projects). Some areas have experimented with the formation of 'reading groups' where people meet together to read and discuss texts or articles. When a post-literacy programme is started alongside other activities such as the creation of a rural newspaper or library (see 6. Making and Using Materials), reading can replace some of the traditional, social activities such as listening to the radio or talking.

By referring back to the group in class discussions 'what you're saying is..... does everyone agree with that ?', a trainer can help develop **group** confidence and encourage students to correct each other.
A trainer needs a certain amount of respect to operate within a class, and yet their time in the village is limited, and eventually they will leave. It is important that the students learn to respect and depend on each other, to work without a trainer and to search for their own solutions.
Either way, the trainer at post-literacy level will probably be working in more than one centre. They will often be working in isolation in rural areas with limited contact with each other. Reading materials will be scarce, and facilities will need to be organised in advance. If extension workers or other project staff are also involved they will need to be informed of a course programme.
A course must be well planned in advance if all the materials and information needed are to be available at the right time. Below are some of the things that need to be considered in planning a course.

3.3 Facilities

The centre is usually the responsibility of the village itself and not of the trainer. Many programmes begin by setting up a literacy committee and it should be up to it's members to keep the building in good repair.
However, before starting a course the trainer should **check** that the centre is ready and adequate to their needs.

Is the group bigger or smaller ?
Are there enough places ?
Is it swept and ready for use ?
Are there materials available in the village or should they be bought in ?

Some small villages may choose to share a trainer and meet together for post-literacy classes at a spot between the two. If numbers in a class are small it can be a good idea: it means everyone walking only half the distance, rather than one group walking all the way. It raises the question of whether a building is actually necessary or whether the group could meet under a tree, on mats, and without tables and chairs.
The main things to consider here are: wind, shade and privacy.
Writing can be done without tables and chairs but it is difficult to concentrate if it is too hot or windy, or if there is a group of children watching and interrupting the class.

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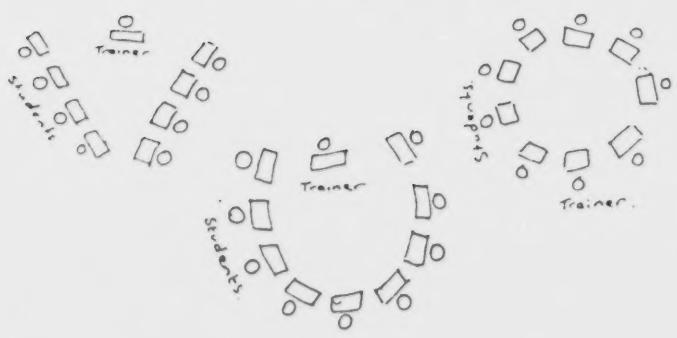
Many Literacy classes that have chosen to use tables and benches have generally organised them in rows. At post-literacy level where student participation becomes all the more important a different seating arrangement may be more appropriate. In order to **talk** to each other students need to **see** each other, which is difficult when the class is in rows. Seats arranged in a V a U or a O provide a better atmosphere for discussion. The trainer is no longer the main focus of the group and ideas do not always need to pass through him.



A blackboard or chart for display is still an important part of the class. It should be fixed where it can be easily seen (opposite a window !) and where students have easy access to it.
If students are to participate in the class they need to be able to move around, to reach the blackboard and to work together in groups. A tiny room crammed with desks can make this difficult. If the space is limited it might be better to do without the desks.

Teaching Materials will include a blackboard, chalk, paper, pens, rulers, large sheets of paper and markers (for visual aids), written texts for reading, cards or notebook (for lesson plans).

A trainer will also need access to equipment used in the field for practical work, such as scales, tape measurers or lengths of string for measuring. These may be available for use with the help of an extension worker.
(More information on making visual aids is given in section 6. Information on making and using reading material is given in section 5.)

Student materials will include pens, pencils, rubbers, paper, notebooks, rulers, slate and chalk.

In Senegal, student materials were bought by the project for the first year of the programme and then re-sold to the students at half the market price. The money gained from selling the materials was kept by the committee as a revolving fund. It was used to buy materials during the second year of the programme which were again re-sold. By buying in bulk the village could get a better price than they would at the market.
Using this system students could obtain materials at a cheap rate. The committee had some money in hand to buy materials in advance. The class could manage their own funds.
Keeping record of materials bought and sold provided the group with real experience of accounting within the co-operative.

3.4 The Student Group

A trainer working in more than one village should take care to consider the different needs and abilities of each different group. A lesson given to a class of men in one village cannot automatically be transferred and repeated with a mixed group in a neighbouring village. Each group will have its own aims determined by the ages and the types of people in it,the documents they need to read and the tasks they need to carry out. These should be taken into account when planning the time and the content of a course.

With a very mixed class involving men and women there may well be a clash of interest.

Try and make sure you don't forget anyone when discussing the organisation of a course.
Don't only listen to the people with the loudest voices.
In some areas the women are traditionally quieter, and will allow the men to make decisions,- don't forget to cater for their interests too.
A mixed class can always be divided into smaller groups during a course to work on areas of a common theme which are particularly relevant to them.(see 3.4 Planning a Class).

Some questions you might ask yourself are:

1. Do the group have common aims (eg. managing a co-operative) as well as individual aims ?

2. Does anyone (or everyone) have special skills and experience that can be built on ?
(eg. some may have experience of formal schooling, all will have experience of work).

3. How different are the starting points of each member ?
(eg. some may be reasonably fluent in reading and calculating, while other may still be beginners)

4 Will there be any problems in combining the different members of this group ?
(eg. men with women or women with youths ?)

5 How can the different skills and abilities of the group be used to help each other ?
(eg. can students who know more help students who know less ?)

With a new group, particularly one that is working together for the first time, it is worth spending some time during the first meeting finding out who the students are. It will help a lot to find out what they have learned in the past and what they expect to learn from your course. This can be done by introducing yourself and telling something of your own background, before encouraging everyone else to do the same. Go round the group in a circle giving everyone a couple of minutes to talk about themselves. By beginning with yourself and your own story, you can help establish an atmosphere of honesty. Everyone in the group will bring in with them certain skills and ideas, all should be equally respected.

3.5 Aims for the Course - Planning What to Teach

If the overall aim for a post-literacy course is to improve fluency in reading and writing it is important to question **why** this is necessary.
In most societies literacy first grew up with trade and the need to keep records and accounts. In many rural societies literacy and numeracy are still closely linked with money.
As well as the individual aims of your students the group will have a number of shared aims which will help decide what to teach within the course.
The aims of your group may centre around establishing an efficient system of book-keeping. They may extend beyond that to setting up newspapers and libraries as a means of information.
They may also include the need to communicate at a distance by letter or telegram. They will certainly be affected by how much local languages are accepted within the country as a whole.
Aims for the course should be discussed by everyone in advance.
A class will not work if the aims of the students are in conflict with the aims of the trainer.

What to teach can only be based on what the people in your area need or want to know.
Deciding what to teach can be done by combining some, or all of the four approaches described below:

1) By observing the tasks involved in their daily lives a trainer can arrive at a list of **tasks** or functions which students need to learn.

For a farmer involved in irrigated rice growing these might include:

a) writing a letter
b) calculating the surface of a field
c) calculating quantities of inputs
d) ordering inputs and paying for them
e) calculating volume of water for irrigation and time to supply it
f) calculating amount of gasoil needed with respect to pumping hours for irrigating.
g) calculating cost of running a motor pump
h) recording planting times
i) recording payments and keeping accounts
j) understanding percentages
k) using credit
l) banking
m) weighing harvest
n) calculating a good price for selling grain or other products
o) deciding when and what to sell, and amount to be reserved for consumption and next harvest.

2) By consulting farmer's advisors or associated project staff a trainer can arrive at areas of **information** or new ideas which may be important to students to know.

These might include:

a) introduction of new crops
- production costs
- possible yields
- possible net income

b) the effects of increasing cropping intensity
- (contre-saison) (double cropping)

c) the effects of better cultivation practices
- good fertiliser supply
- good water supply
- good planting distances

d) possibilities for growing other crops, eg vegetables,

e) calculating relative value of extra cost for extra income,improved fertiliser, diesel and labour giving higher yields.

f) improving organisation of
- transport for commercialisation
- communal buying of inputs

3) Through questions and discussions with students you can discover the gaps in their own understanding, and find out what they want to learn about.

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This might include:

a) Growing trees, creating windbreaks
b) Better nutrition
c) Hygiene and health – the causes and treatment of certain diseases
d) first aid
e) safe drinking water
f) conservation and storage of paddy
g) legal rights and co-operatives
h) possibilities for employment in town
i) buying and using a grain mill
j) income generating activities

This list is broadly a list of **themes** and **tasks**. A task is something a student learns to do, like writing a letter to a friend or calculating the cost of fertiliser for a particular area.

We suggest building a programme around **themes** and fitting in the tasks where they are most appropriate. Themes can form the basis for your classes and bring together the different activities the group need to practise. By deciding to create a programme around different themes you can build up a course that is suitable for your own group, whatever their age and background of the students.

4) Involving your class in the choice of themes will help ensure that the course is relevant to their needs. A good way to do this is to **BRAINSTORM**.

Brainstorming means asking everyone in the group to come out with any ideas they have, in this case areas about which they wish to learn. All these ideas are written up on the board by the trainer, who, from his own observations, will be able to add more.
The complete list is then discussed, irrelevant ideas are thrown out and similar ideas linked together.

Your board might look something like this:

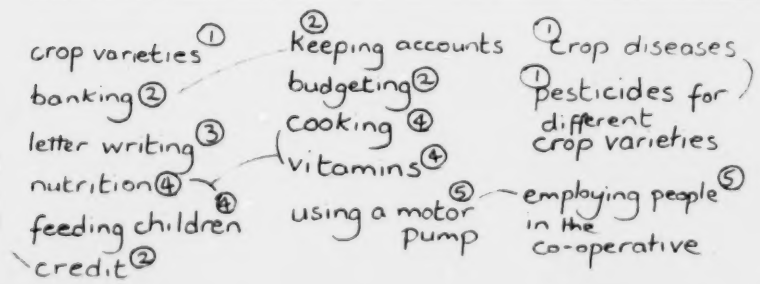
For example:
i) problems of lack of money could be linked with ways of economising, organising a budget, adding, subtracting and multiplying amounts of money and activities for generating income.

ii) maintenance problems for a group motor pump could be linked with simple mechanical skills, types and grades of oil, and discussions on the role and means of payment of the fuel pump operator.

After the class, these themes should be arranged by the trainer into a programme for the course. Ideas should be planned to follow on from one another, but above all to fit in with the seasons, and therefore the time when the information will be needed and used.
Plan to teach something just before it will be used, for example onion harvesting when people are preparing to harvest their onions, but not at a time when they are too busy in the fields with harvesting to come to class.

- Look at the programme you have written down: are you the best person to lead every session?
- Is there a student who knows more about some of the ideas included who you might ask to lead a session?
- Is there someone from the project, another village or a nearby town who you could invite to teach some of the sessions?
- Is there any extra information you need in order to teach these themes?
- Where can you go to get this information?

Allow sufficient time for each theme, according to the number of tasks involved. Build into your programme tasks your group can practise on their own in 'group-led-groups'. Keep your programme flexible and submit it to the group for their approval.



Further advice on building tasks and activities into a programme are given in 4: Planning a Lesson, 5: Organising Learning activities and 6: Making and Using Materials.
Further advice on activities for group-led-groups are given in 6.5 Village Libraries and 7: Village Projects.
Ideas on building up activities into a 'Cropping Calendar' are given in 7.5

Discuss your provisional programme with your class, change it where necessary, and together arrive at a class contract.

3.6 Contracts

A contract is a binding, sometimes legal, agreement between two people or groups of people. The contents of a contract are generally arrived at through discussion - the terms of the contract are written down when agreement is reached and the contract is signed by both people or groups concerned.

Some of the most common types of contract are:

i) contracts of work - stating the terms and conditions under which someone will work,

ii) contracts to rent - houses or land, stating conditions of use,

iii) contracts of sale - stating conditions under which something is bought.

A farmer may be involved in all three types of contract, and may at some stage be asked to sign them. Contracts are also usually signed by two witnesses, and it is important that the signer understands what they are signing for.
Creating a class contract introduces your class to what a contract is and what it does. It gives students a further chance to participate in the organisation of their course, and can show how and where a contract can replace a former verbal agreement.
A class contract should include the content of the course and the conditions under which you will work together.

Firstly
- Present your provisional programme to the class for discussion. Is everyone happy with it ? Is anything missing ? Does it fit in well with other activities and the time available ?

Secondly
- Make any necessary changes and discuss with the class:
what expectations you have of them,
what time should they arrive in class ?
what materials should they supply ?
what else are they responsible for ?

Thirdly
- Find out from the group their expectations of you:
how much time do they expect from you ?
how much information do they expect from you?
what do they expect you to supply ?

When agreement is reached a contract should be drawn up making these responsibilities clear. The contract should then be dated and signed by the trainer, a representative from the class and two witnesses. Both groups should keep a copy. Although the programme can still remain flexible, certain conditions concerning the class should now have been made clear.
Try to build into the class other examples of contracts used in your area.

3.7 Evaluating the Course

In order to make sure that your class understands what you are saying, and that the course is useful it is important to have regular periods of evaluation.
Evaluation should check that the aims of your course are being fulfilled, and find out if those aims have changed. Evaluation should measure not only the progress of your students (tests to show how much they have learned), - but also your own progress - (a questionnaire to see how well you have been teaching). This will enable you as a trainer to add to your programme things that are missing or to change direction if the course is not going well.
Evaluation by students. At literacy level students are often tested by the trainer. At post-literacy level it might be more useful to ask students to write down what they think of the course, what they think they have learned and how they would like it to change. This can be done in three short sentences and will enable you as a trainer to see how well they are writing as well as to read their ideas.
This can be extended into an informal discussion where people can say what they think about the course. But try to keep all criticism constructive by commenting on the **good** things as well as the **bad**.

Evaluation by an outsider It is often useful to ask someone from outside the class to sit in and observe a lesson. By watching you and the students they may be able to tell you when and where your language is confusing, and what could be done differently.

Good observers are: farmers advisors
project staff
other literacy trainers

They may also be able to offer you advice on technical subjects and learn some communication skills from you at the same time.

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Evaluation of yourself. It is a good idea to write down in advance your aims for the course in the form of a checklist, and to go through it at intervals to see if you are achieving them.

For example - is my course helping my students to
i) understand the changes happening in this area?
ii) question rather than accept?
iii) take more responsibility for their own lives?

Examples of Themes

For a group of farmers -

CREDIT
the need for credit
managing credit
banks - opening a bank account
cheques - writing a cheque
calculating percentages
understanding interest
keeping accounts and using 'fiche de gestion'

For a group of women -

NUTRITION
the value of different foods
building foods, energy foods, repairing foods,
vitamins and where to find them
foods for children
making a nutritious porridge

For a group of youths -

MARRIAGE
Monogamy or polygamy - looking at the advantages. The Qualities of an ideal partner
Choosing your own partner or accepting your parents choice
The cost of planning a wedding - (budgeting)
Contraception - (information).

4. Planning a Lesson

4.1 A Girl goes to School

Assaitou's brothers went to school. They left home early in the morning to walk the 8 kms to the neighbouring village where then school house was, and studied there until mid-day. Then they walked back and arrived in time for the meal that Assaitou and her mother had spent the morning preparing.

Assaitou longed to go to school but she was needed to work at home. Her mother was the only wife, the family was large and there were many tasks to be done around the compound. Assaitou would spend her mornings collecting wood, boiling water, sorting rice, stamping grain and helping with the cooking. When there was a lot of work to do in the fields she would help her father, planting out the rice or scaring birds away from the ripening grain. During the afternoons she would help her grandmother who dyed cloth using indigo dyes she prepared herself.

Assaitou would go out with her grandmother to collect and dry the indigo. She learned how to mix the dried indigo with boiling water to make dye. Together they would stitch lengths of white cloth into tiny pleats or work on it with hot wax before dipping it into deep pans of boiling blue dye. Ever since she was a child Assaitou had watched her grandmother work, helping as soon as she was old enough to fold a length of cloth and thread a needle.

By the time she was nine she was using the wax to design patterns of her own. The blue and white material was sold in the village, or stitched into boubous to be taken to the towns.

Still Assaitou longed to go to school with her brothers. She hated it when they went off in the mornings without her and she was forced to stay and work at home.

Her chance came when her father married again and took a second wife. With another woman to help in the compound Assaitou wasn't needed quite so badly, and after much argument she was allowed to attend school. She was given a place in the first class.

By the end of the first week Assaitou was disappointed. After walking the 8 kms to the school she was forced to sit down on a bench at a desk for three hours at a time. She wasn't used to sitting on benches and to keeping still for such long periods. The morning seemed to last for ever and she found the benches uncomfortable.

During the class they memorised the names of presidents, all of whom were dead, they looked at maps of places she would never go to, they repeated quotes made by people she had never heard of, and talked about things she would never do.

Assaitou knew her father was proud to have a daughter that went to school as well as his sons, she knew her grandmother felt she was lucky to have a place. She knew how much she'd longed to be there herself. And yet within a couple of weeks she began to hate sitting in a line with a group of other children repeating things that didn't seem to mean anything to her. The mornings seemed long and dull. More and more Assaitou began to look forward to the afternoons. While dying cloth with her grandmother at least she was making things that people would use. With the constant practice of working wax her skills were improving, she knew how to sort indigo and mix dye. Although their income was small they were together earning a little money to help support the family. Suddenly this seemed to Assaitou to be a lot more important than what her brothers were doing sitting still at school.

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Some questions you might ask yourself -

- Why was Assatou so disappointed with school ?

- What is the main reason for going to school ?

- What did you find most useful about your own school days ?

- What did you enjoy most and feel you learned from best ?

4.2 Making Learning Relevant

Assatou's experience of school is a bad one. Although she longs to go she finds the lessons of little use. The things she learns seem to have little to do with the way she lives and the way of learning them, through rote and repetition is very different from what she is used to.
She begins to feel that the things she has learned by watching her grandmother are of far more use to her and to her family than the things she is learning at school. In most societies formal schooling carries a certain status. People are often seen to be more important because they have been to school, going to school can seem more important that what you actually learn there.

The story of Assatou illustrates three important things for trainers.

Firstly - when people have been doing things for a long time they often don't question why they are doing them. Teachers and trainers everywhere often fall into the trap of teaching something without carefully considering why.

Secondly - how something is taught, as well as what is taught, needs to be relevant to peoples' lives.

Thirdly - girls and women have a right to education, just as boys and men. In some societies men and women prefer to be taught separately, and may need to be taught in different ways.

The next section on planning a class, looks at how and what to teach, to help ensure people gain something, besides status, from your class.

4.3 Objectives for the Lesson

After planning your course it is still important to decide on clear goals for each lesson. Your goals should be realistic, something that you and your students could achieve in the time you have together.
In a post-literacy class this will probably include a better understanding of the **theme** chosen for the session, learning a new **task** related to the theme and practising some of the **skills** developed in earlier classes.
In planning your course the different tasks your students need to learn should have been grouped together with related themes.

Objectives for a class on Credit might be:
- To understand the importance of Credit given at planting time and the means for repaying it.
- To learn how to fill in and use an account book.
- To look through the page of an earlier account book and to calculate how much still needs to be repaid.

Objectives for a class on Ordering Fertiliser might be:
- To share information on the different suppliers of fertiliser in the area, their prices and their terms.
- To calculate the surface area of a field and the amount of fertiliser necessary.
- To calculate the total ammonates and cost for the whole group.
- To fill in an order form and to fill out a cheque.
- To organise a method of individual payment by subscription and to decide how to arrange transport.

Try to be accurate in the words you choose to describe your objectives.
Each separate point should describe what you hope your students will be able to **do** by the end of the class.
When the objectives have been decided upon the class has a **direction.** Although during that class problems may come up which prevent you reaching those goals, the trainer at least understands what he is setting out to do.

Writing down aims and objectives in advance helps a trainer to understand them better and to question whether they are worthwhile.

Some of the skills learned in earlier classes should also be practised. Skills developed in a literacy programme include:

1. Reading a text and understanding it.

2. Reading instructions and being able to carry them out.

3. Calculating by head.

4. Calculating using a calculator.

5. Filling in forms and records.

6. Writing a set document, (eg. a letter or a notice)

7. Writing to record ideas or new information.

8. Using new information to solve problems or make decisions.

Although not every skill will be practised in every class it is useful to check from time to time to make sure they all appear regularly throughout the course.

4.4 Choosing Teaching Methods

In formal schools, such as the one Assatou attended in the story, things are often taught through lecture and repetition.
The teacher talks and gives the information; the students listen and repeat it. This method has often been described as a teacher pouring knowledge into the head of someone who doesn't know anything. Learning in this way does not help people to develop confidence in their own abilities.

Literacy classes are often built around a syllabus which has been designed to teach letters. The literacy teacher will have learned to use different activities to introduce each letter and to practise reading and writing. He may well use the same activities in the same order in every classe. Each class might follow the same pattern. Students soon get to know what is coming next and feel safe in understanding how a class 'works'.
There is an argument for teaching in this way, but a **post-literacy** course built around themes and without a syllabus needs a different approach. The wider range of tasks to be carried out will use a wider range of activities.
The trainer will be more involved in setting up activities that people can learn *from*, than in directing those activities from the front of the class.
Outside of a school people learn to do things in different ways.

1. By *listening* and then *doing*.

2. By *trying* for themselves and *discovering* how to do it.

3. By *watching* and *imitating*.

A post-literacy class aims to break down the barriers between learning in a schoolroom and life outside. It also aims to help people to develop confidence in themselves. In order to do this, ways of learning used OUTSIDE school are probably more effective than those used in formal schooling.

1. Listening and then Doing - a literacy trainer does at times need to give information or instructions to a class. Some time will be spent with the trainer talking and the students listening. This time should be limited, generally no more than one third of the lesson time, and followed with an activity that allows students to try out what they've been told.
Repeating what a trainer has said or copying down sentences has less value and should not be used without good reason.

2. Trying out and Discovering - often people remember best the things they have discovered for themselves. At times, instead of telling students information, activities can be set up through which students discover that information themselves.
Solving problems or experimenting to find solutions can be done alone or in small groups.
More information on organising learning activities is given in the next chapter.

3. Watching and Imitating - throughout their lives people have been learning things by watching and imitating. Sometimes a trainer will want to demonstrate an activity to students before asking them to do it themselves. Watching and imitating go together, after watching something students should have the chance to try it for themselves.

All three ways of learning should be accompanied by discussion.
Students will always have their own ideas about ways of doing things, sometimes they may know more than the trainer.
Acting like the teacher in Assatou's school, and attempting to pour information into student's heads, means ignoring everything that is already there!.

Think about all the things you have learned in the past, and the way that you learned them - which way worked best for you?

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People learn in different ways. Some prefer to be told what to do, others prefer to sort things out for themselves. A well planned lesson should include different teaching methods and activities in order to take this into account.
By changing activities from one where students are sitting listening, to one where they are doing something, helps wake people up, and renews concentration. Try to change activity about every 45 minutes, (more often with groups of children) in order to keep the student's attention.

4.5 Writing a Lesson Plan

Careful planning of a lesson is very important, particularly for a new trainer. When you and your students know each other well you may decide it is better to be less well planned and to give the time over to them to discuss any problems they have encountered.
For the inexperienced trainer it is vital to think out in advance what you intend to do in order to ensure you have all the necessary materials and exercises ready, and to anticipate the problems you might meet at any stage. Ideas on how to set this out are given in a sample lesson plan found on page 25.
Being well prepared, and having a clearly laid out plan before you will help increase your confidence. But a plan, however detailed, should never be too rigid it can't be changed, if it seems not to be working or if something more important comes up.

Sample Lesson Plan

DATE 23 June TIME 3.30 - 6.30

THEME Buying and Using Fertilizer

AIMS AND OBJECTIVES
- To decide what is the best type of fertiliser to use and where to buy it
- To calculate costs and quantities
- To fill out an order form and cash book.

SKILLS PRACTISED
- Decision making, using information available
- Multiplication of surface area, and of cost.
- Form Filling.

MATERIALS NEEDED
- Prices of fertiliser from different local suppliers
- Order forms and page from cash book

TIME	ACTIVITY	Possible Problems
3.30 - 4	Discussion: Advantages and disadvantages of using fertiliser	Check students understanding of types available and any dangers in using them.
4 - 4.30	Ask students to list advantages and disadvantages on blackboard.	Divide board in half.
4.30 - 4.45	Write up different prices of fertiliser on board. Decide which is best value for money	There may be some disagreement.
4.45 - 5.00	Ask each student to calculate how much they will need for their individual field, and how much it will cost.	Some students will need help with calculation
5 - 5.15	Break.	
5.15 - 5.45	Divide class into groups of 3 or 4. Ask them to calculate total amount of fertiliser needed for a scheme, total cost, and individual costs for each member. Ask them to consider any extra costs involved eg: Interest, if buying on credit. Transport Costs	Make sure everyone is involved in group work, and that no one dominates.
5.45 - 6	Check the results of the different groups. Discuss the different decisions they have made. (eg Choice of supplier, Means of transport)	Ask someone from each group to explain why they have decided on that particular supplier, and that amount.
6 6.30	Give out order forms and cash book pages to each group. Ask the group to fill them out with the calculations they have made.	Go round to each group to make sure they have filled in the pages correctly.

Students may raise other problems during the class which they wish to investigate. If you decide to change direction during your lesson - abandon your plan in the **reverse** order to which you wrote it.

i.e.:
1) Change an activity and try something else that works on the same tasks and skills.

2) Abandon the task and skills set for the lesson to discuss something else related to the same theme.

3) Abandon the theme last of all, and only if the majority of the class agree to do so. You have, after all, made a contract with them to discuss it.

By being open to changing your lesson plan in that order helps you to keep in touch with what your students want and to keep some structure in your course at the same time.
Well-planned class takes account of what the students want to learn and need to practise, is well thought out in advance but able to be adapted at any time;

Badly-planned class may be too *rigid* in trying to teach what the trainer has decided is important, which might not be what the students want to learn;

or too *loosely structured* with neither the trainer nor the student knowing what is coming next.

4.6 Methods of Revision

When something new is learned it usually requires constant practice. A post-literacy class should always include time for **revision.**

A *good method for Revising Ideas* is to bring into class flash cards used for discussion in earlier literacy classes.

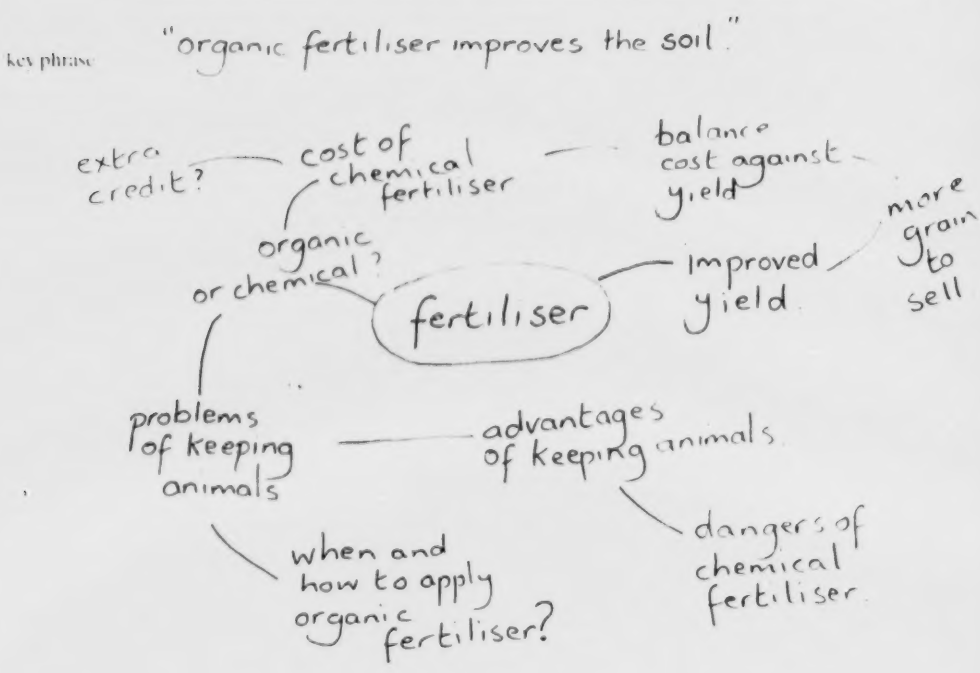
Ask your students to recall and write down the key phrase for that picture.

Ask them then to add any further information they can relating to the key phrase.

Ask them to read and correct each others work adding any knew ideas to their own lists.

Go through the main ideas with the group writing up principal words on the board. This can be done by using a *mind-map.*
A *Mind Map* is a diagram with the principal word or theme written in the middle and other words added to it as they come up.

for example:



This exercise will also help students to assess their own progress by making them aware of what they have learned since the same 'key phrase' was first used in a literacy class.

Revision of Skills and Tasks should be inbuilt into your course at post-literacy level.

By simulating real problems for students to work on, (eg. the buying of inputs for a field of set dimensions) activities such as reading, writing, adding, multiplying and dividing will all be included.

4.7 Evaluating the Lesson

It is a good idea to spend five minutes at the end of every class evaluating what has been achieved. Ask one or two of your students to go over what they feel they have gained from the class, what they have practised and what new information they have learned. It will help you and them to see which of your aims and goals have been reached.

You may also want to use the following check list to evaluate your own teaching.

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Personal Check List

In this class have I:

i) made sure I was well prepared?

ii) related the theme to the everyday life of my students?

iii) used different activities to vary the rhythm of the class?

iv) used questions and presented problems to help everyone participate?

v) given everyone the chance to speak, even the quieter students?

vi) given students the chance to work alone and in groups?

vii) spoken clearly and in words that everyone understands?

viii) responded to students mistakes with patience and positive advice?

ix) shown enthusiasm?

x) avoided embarrassing anyone?

xi) checked to make sure that everyone understood?

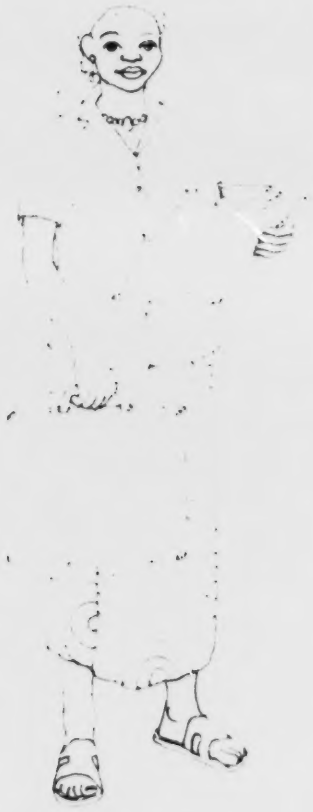
xii) been available to discuss individual problems after the class?

xiii) remained aware of the overall feeling of the class?

xiv) remained objective and open, - also to criticism - which is often useful?,

xv) remained loyal and respectful to everyone, and helped them to work towards their own personal goals?

xvi) (you might like to add more of your own)



5. Organising Learning Activities

5.1 'I don't know because I've never done it' - the story of Demba's broken pump

Demba was the village pump operator. - he was paid by the group of farmers using the irrigation scheme to start up the village pump every morning and to keep it running, filling it up with diesel and changing the oil when necessary. He wasn't a mechanic, he was the son of a farmer, but he had received some training. When the village was first given the pump he attended a training course with the pump operators from different villages, where he learnt the basics of maintenance.

Demba could also read and write and during his training he had taken down a note-book full of notes. He had also learnt that the air filter had to be changed regularly, to keep the pump running well.
He checked in his records the date it was due to be changed, and went down to the pump early that morning with spanners and plenty of rags. Looking through the diagrams he'd made during his training he could identify the air filter, and he unscrewed the bolts at each end, but he couldn't see how to detach it from the engine.
Demba was aware that the motor pump was out of action for more than a day the rice crop would suffer from lack of water. However, although he had made a careful drawing of the filter in his notes he was unable to see how to take it out so that he could replace it. There was no-one else in the village who could help, and Demba sat, staring at his notes but not finding them very much use.
By chance Demba's brother in law, his sister's husband, passed by during the morning. N'Dow lived in a different village, and though he wasn't a pump operator their pump had had the same problem a week before. N'Dow had been around while the air-filter was being changed and had helped to lift it out. Having done it before he had no problem in helping Demba to change **his** air-filter and, by dinner time, the pump was fixed and ready to work.
Demba went, happily, to his Literacy class that evening and related the story to the trainer, M'Baye. 'How lucky I was' - he said - 'that N'Dow passed by this morning. God must truly be on my side, now, if it happens again I'll certainly know what to do'.
Later that night when the class had finished, M'Baye, the trainer thought about Demba's story. He wondered how much of what he talked about in his own classes was understood by his students and remembered. He realised that although Demba had been **told** about changing air-filters, it was necessary for him to **do** it in order to understand.
M'Baye's students were also being **told** things, but would they be able to **do** them when the problem arose?
M'Baye could see that people really needed to experience something if they were to understand it properly, and that, as with Demba's brother in law, *experience* was probably a far better teacher than *information*.

He questioned how he might give his students the chance to experience possible problems during his classes.
There is a Chinese proverb which says:

I hear and I forget

I see and I remember

I do and I understand.

Some issues for discussion:
- what sort of things can you learn best by hearing about them?
- when is seeing something more useful than hearing about it?

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- what sort of practical activities could be introduced into a post-literacy class?
- what are the problems involved in organising practical activities?

This section gives ideas for organising activities in class which will help students to experience problems they might later encounter, and - by doing things, to discover answers for themselves.

5.2 Learning by Doing

Most people will not understand or use new information until they can see how it relates to their lives. Speaking in complicated language and using long, unfamiliar words may show that you know a lot, but that knowledge is no good unless you can **use** it.
As a trainer your teaching will be of no use unless your students can understand you, and identify with the situations you describe.
Preparing for a class means learning how to set up situations which your students will relate to, and building activities that will help them discover things for themselves. While the students are involved in working on activities a trainer can check that everyone has understood, individual students can be given help on things they find difficult, either by the trainer or by another student. You are free to watch what everyone is doing, give help or encouragement where necessary, and make sure everyone is involved.

WARNING
In every group of people there are some who talk more than others, some who have more confidence and some who prefer to keep silent. But in a class a student who constantly dominates a discussion can get in the way of other people learning. Try to make sure that everyone gets a chance to speak and is involved.
Once in a while it is useful to establish a rule that no-one speaks a second time until everyone has had a chance to speak once. This helps to draw attention to people who take over, and to who is saying what. But it should not be used too often as it can inhibit discussions.

5.3 The Value of Games

A game is a contest with rules, which involves the players in matching or testing their skills. Games can be played by individuals competing against each other, or by people working together in teams. The winner is generally the person or team who is most successful, or who scores the highest number of points.
Some games test strength or physical skill, others can test what people know or remember. They can be an interesting way of finding out how much people have learnt. Games are often criticised for being childish or not sufficiently serious enough for learning, but they have two very important factors.
1. People learn best when they enjoy something and are actively involved. Games involve people in solving problems, and are fun.
2. Games can provide the practise necessary for a new skill to become assimilated and capable of being used without thinking.

for example:
When you see the number 135 you know immediately
- that it is one hundred and thirty five,
- that it is more than 100 and less than 150,
- that it is 5 more that 130.

When you see the letters *c a n a l* you know immediately
- that it spells canal,
- that it is long and straight, and carries water,
- that it is an important part of an irrigation system.

That knowledge has been assimilated and can be recalled automatically. Practise in reading means you no longer need to spell words out. Practise is important in helping new readers to recognise and use letters and numbers, it is especially important in mental arithmetic.
Mental arithmetic means developing a strong concept of numbers, and understanding how they relate to each other. Once learnt, it is used constantly in daily life, in the market, in the field, at home. It is also important in being able to check a longer calculation carried out with a calculator, and to ensure that it could, at least, be correct.

eg:

28% of 349.
349 is almost 350.
28% is a bit more than a quarter.
Half of 350 is 175.
Half of 175 is 137.
So - 28% of 349 will be around 142.

My calculator says 54, therefore I must have gone wrong.

Games can be used to help students to recognise automatically:

i) numbers that add up to 10 - 5+5, 6+4, 7+3, etc.

ii) one more, and one less than any number, eg: 12+1=13, 12-1=11

iii) multiplication of a number by 2, eg: 12x2=24, 15x2=30

iv) rounding up decimals, eg:9.8=10, 9.2=9

v) ranges of numbers, eg: 48 is between 40 and 50

vi) the division of multiples of 10 by 10, eg: 40 10=4

vii) the approximate distance, weight, size or time for something

viii) a basic fraction as a decimal, eg: 1 2=50%, 1 4=25%

Students will need to be familiar with these basic concepts of numbers if they are to use numbers effectively, with or without a calculator.
Learning mental arithmetic 'automatically' can be turned into a game by having a series of quick questions ready to fire at the students during the first five minutes of every class.

For example: What is 5 divided by 5?
What is 6 multiplied by 4?
What is 32 and 17?

Ask them to work out the answer in their heads, then at a signal from you to write the result down on their slates and hold the slates up, facing the front. The trainer can quickly see who is getting correct answers and who is having problems and may need extra help, and the speed of the exercise turns it into a game.
Other games can be used to test people's skill in recognising letters, in reading, in remembering information they have learned and in working together as a group. Some games depend on luck and combine skills of literacy and numeracy by involving players in throwing dice and adding numbers as well as answering questions.

Games can also be used to fill in extra time at the end of a class or as a change of activity if students are becoming bored. Students should be encouraged to use them with group-led groups or at home.
A list of games for literacy and numeracy practise, and instructions on how to make them, has been put into the annex so they can be easily found for reference.

5.4 Problem Solving in Groups

Giving students problems to solve in pairs or in groups keeps everyone involved and gives them a chance to share their own ideas with each other. It will involve you, as a trainer, setting up the problem and being around to answer questions where necessary. The size of the group will depend on the problem set and the number of people in the class.
One way to do it is by PYRAMIDING. Pyramiding means beginning by thinking about something on your own, and gradually discussing it with more and more people.

i.e:

1. Present a simple problem to the class and ask students to think about it individually for 3 minutes.

2. Ask students to get together in pairs with the person next to them and share their ideas with each other for 5 minutes.

3. Ask each pair to get together with another pair and to find out if anyone has any ideas they have not thought of. Give them 8 minutes.

4. Finally bring the class together and discuss the ideas of the whole group, - listing the main points on the board.

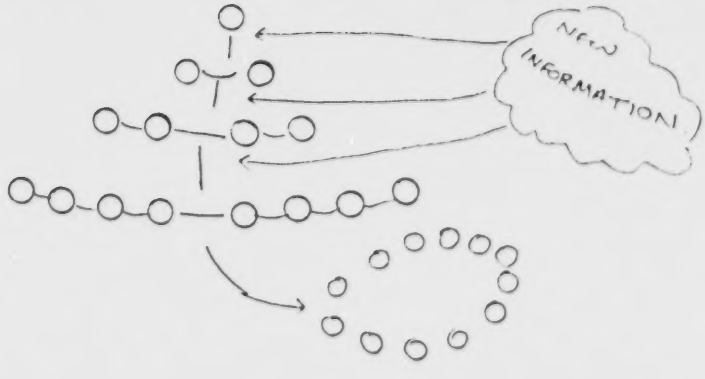
Working in this way will help give shyer students more confidence in speaking in front of everyone. It might be useful to add more information or to make the problem more complicated at each of the four stages.

i.e.:
1. Think about where you would go if you needed to borrow money and jot down some ideas on your own.

2. Discuss your ideas in pairs, and think about how you could borrow a lot of money, say 150,000 FCFA in order to buy inputs for one season.

3. Join up with another pair, and discuss also how you might repay the money in each case you've noted down.

4. Share the ideas with the whole group and go on to talk about ways of recording loans, and the problems involved in taking credit.



A short problem, like the one used above in Pyramiding might take up half an hour of class time. With a longer problem involving several different tasks, a single group might need a whole session to complete it.

In setting up a problem:

- Make sure the situation you describe is similar to a real life situation that your students might have to deal with.
- See that everyone has enough space to work in and any materials they might need.
- Allow groups to spread out, both inside and outside the classroom so they are not disturbed by other groups.
- Give *clear* instructions on exactly what you want your students to do.
- Be available to answer questions where needed but try not to solve a problem or make decisions for the group, allow them to find their own solution.
- Leave sufficient time at the end of the session for students to report back to the rest of the class on what they have found, and for a discussion of the results.

For example: - a problem set in an area where students are growing vegetables might be.

Imagine you have a communal garden which everyone in your group will work on.
The total area of the garden is three hectares. Someone suggests planting 0.5 of a hectare with cassava. Calculate how much cassava you would need to buy to plant the area, and how much it would cost. If your harvest is good and you are able to sell 50% of your crop how much money will you make? Divide the remaining 50% between the group, how much do each of you have? Share the profit between the group, how much will each of you have? Are there any more expenses that should have been detracted from the profit?

Decide: If 0.5 of a hectare is all you want to use for cassava. How you will record money spent and profit made. How you will divide the work involved between you, if you want to use any of your profit for communal activities.

5.5 Role Play

With some situations you might ask students to act out a part of the problem in order to make the experience of it more real. This is called **role play**. A role play does not involve learning parts or lines. Generally it is spontaneous with little or no practise. In small groups students are asked to play a given character, or themselves in a given situation. As with problem solving the situation should be made clear and as close as possible to everyday life.

Using role play allows students to feel what it is like to be someone else, or to be in a different situation, before attempting to discuss the problem involved.

Role plays can form a useful part of certain themes. They can help students to develop confidence in themselves and try out roles of leadership or management.

but:
In some areas it is culturally difficult for people to act in front of others, don't ask your students to do it until you know them well and have developed a feeling of trust in the group.

Try taking on a part yourself to demonstrate the technique, and ALWAYS leave enough time afterwards to discuss the issues raised. A ten minute role play may generate an hour's discussion.

An example for a role play concerning irrigation might be:

A farmer constantly takes too much water into his field. His field is also badly levelled. In order to get enough water in the middle of the field the plants at the sides are suffering from too much. He is also wasting pumping time, and keeping other people waiting for water. The president and vice-president of the group are asked to speak to him about it. The farmer tries to defend himself.

PLAN FOR ROLE PLAY

Problem: How to make someone understand the importance of levelling a field and complying with the rules of an irrigation system.

Actors:-
Farmer 1 with badly levelled field
Farmers 2 & 3 with neighbouring fields.
(They report farmer 1 to the bureau.)
President and vice-president of the group
(They have to sanction farmer 1_4)

Action:-
Begin with farmers 2&3 in the field discussing farmer 1. They try to explain to him themselves why he should level his field and use less water.

Farmer 1 refuses to listen so they decide to report him to the bureau.

Continue with the scene between farmers 2&3 and the members of the bureau.

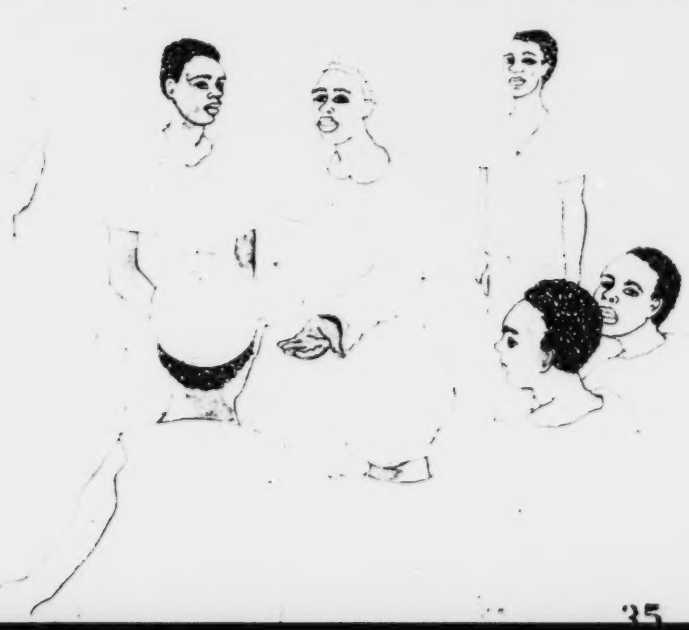
End with the scene between the president and vice president sanctioning farmer 1 and farmer 1's defence.

Time:-
10 - 15 minutes

Questions for discussion following the Role Play:

1. How important is it to comply with the rules of the group ?
2. What rules should each system have ?
3. How can you reprimand someone who doesn't respect the rules ?
4. Did the people in the role play explain **clearly** the reason for each of the rules ?
5. What is the first farmer now feeling ?
6. Will he respect the rules in future or is he just angry with the people who reported him ?
7. Is it fair to report on someone who is breaking rules?
8. Could anyone have acted differently in the same situation ?
9. How did the president and vice-president feel about sanctioning someone ?
10. What have you learned from the role play ?

Successful role plays which develop general awareness of social problems can often be turned into theatre and performed in front of the whole village.
More advice on how to do this is given in section 6.: Village Projects, under 6.3: Organised Theatre.



5.6 Story Telling

Throughout this book stories have been used to introduce each section. In most societies, especially those where literacy is comparatively new, story-telling is an important part of cultural life, and a common way of transmitting information. Because of this story-telling is a useful technique for the literacy trainer. - new ideas can be built in to traditional stories, and legends and proverbs used to illustrate new problems.
A good story, well told, is usually a much better generator of discussion than factual information, and much more likely to be remembered.

Some ideas for using stories are:

1. Tell a story to your class and stop at a significant point.
Try to include an element of suspense and an area of social concern.
Ask each student to write their own ending.
Ask students to swop stories and read each others endings.

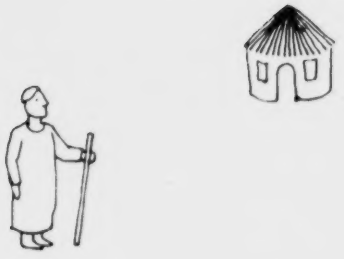
2. Write a proverb on the board.
Ask each student to think of a personal experience that illustrates the meaning of the proverb and to write it down.
Discuss the meaning of the proverb in everyday life.

3. Build up a book of traditional stories by asking students to write down their favourite ones as a way of recording them. (2 & 3 could be developed into village projects, see section 6.)

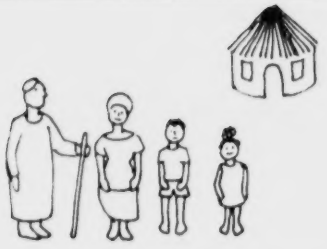
4. Build up a story with your class through blackboard drawing and questions. Ask students to supply information about the figure you draw and add the details they give you to the drawing. This way it is their story, and they are telling it. When they have finished ask them to write it down, adding their own details and saying what they have learned from it.

e.g.. The picture as students give it to you

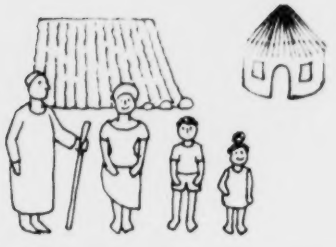
who is this man ?
where does he live ?



how many wives does he have ?
how many children ?



how much land does he need to support this family ?



do his wives have land or money of their own ?
where do they get it from ? are they happy with this situation ?

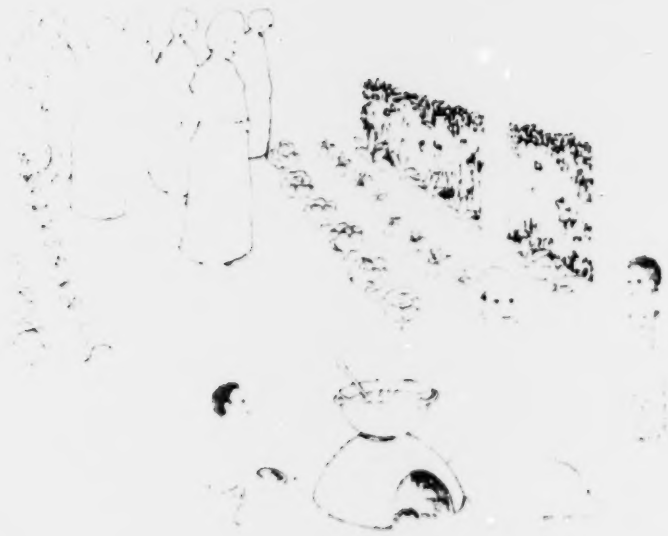
etc.

Stories are always more interesting if you ask students to give local names to the characters or talk about people they know. You might want to 'create' a series of characters and use them again and again in your class.
A short course on blackboard drawing is given in the annex for easy reference.

5.7 Demonstrations and Visits

Whatever training activities you set up within a class, nothing can replace the value of field-work, demonstrations and visits to other schemes or areas. Being able to see something, whether it is a good or bad example, makes it a hundred times more real, and is usually worth all the time spent organising your group to be there. It will enable them to learn from their own actual experience, and that of other people.

Demonstrations of how to measure a field, clean out an irrigation canal, prepare a certain vegetable to eat or change the oil in a motor pump, can usually be done within your own village.
Use the field as your classroom, go out as a group and arrange for someone experienced to give a demonstration.
Give your students the chance to do themselves what it is they've been watching.
Get them to use tape measurers, tools, weighing machines, to actually weigh or measure something.
Help your students to relate what it feels like to walk round one hectare to the measurement, to relate 25 kilos to lifting a 25 kilo sack of rice. Adults who have not learned to write will have spent a lifetime judging distance by eye, and weight by feel.



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If you are to introduce a system for weighing and measuring it is important to make a relationship between this new system, and their own experience.
Encourage students to take notebooks into the field with them and to make notes while you are working.
Go back into the classroom together after the demonstration to check the notes students have made and to answer any questions. It will probably be difficult to make proper notes in the field.
Reserve sufficient time afterwards, as a group, to share ideas and impressions on what you've seen and learned.

REMEMBER: if there are farmers advisors or agricultural experts in the area, try to involve them in your field work, they may well know more than you.

Visits to other areas if it is possible to arrange transport to visit another area a lot can be learned from seeing another approach.

A group of men wanted to construct a well in their village. They went to a neighbouring village to see how theirs had been built. They noticed that this well, though well built, was a long way from the market place, and that the women had to walk a long way in two different directions every morning. They decided to copy the design of this well, but to build their own nearer the market place to make water collection easier.

A group of women in Senegal were taken to visit the vegetable gardens in a neighbouring village. They went to look at how a windbreak could be planted around a garden to protect the plants. Many of them had never been outside their own village before. They saw for themselves the effect of a windbreak and how the plants in the sheltered garden were doing far better than their own. Although they had been discussing for weeks the possibility of planting a windbreak, it was only the sight of the young, strong plants in this protected garden that inspired them to do so. They also saw that the women in the neighbouring village were using wood stoves to cook on, and asked if they could learn how to construct and use wood stoves too.

Before going out on a visit, make it clear to yourself, your group, and the people you are visiting what it is you are going to see.

Give your students clear guidelines on what to look for and what to record.
After a visit allow plenty of time to discuss and share what you have seen. People will have learned many things, apart from what you set out to look for.

Creating a Demonstration or Experimental Plot as a practice area can give farmers the opportunity to try out new ideas for themselves. The cultivation of different varieties of seeds, add more or less fertiliser, different amounts of water or pesticide can be tried out alongside each other. Farmers can see for themselves what

works before deciding whether or not to adapt the practice in their own fields.

Inviting People In. It is often difficult to arrange transport to visit other areas. An alternative is to invite someone in to talk to your class. Some of the things that come up for discussion in your class will be outside the scope of the Literacy Trainer, and someone else may be better qualified to answer questions.
If your class has asked to investigate a theme you know little about, suggest you invite someone who does, a technician, a mechanic, a health worker or a representative from the local bank. Brief your visitor in advance on the abilities of your students, their background and experience and the way they like to learn. Make sure in advance exactly how much of the class you want them to take over, and what it is you're asking them to do. Encourage them to speak in simple terms so that everyone can understand, and to use some of the time for answering questions. Beware of the person who seems more concerned with showing what they know than with finding out what your class wants to know about. Follow up their visit with activities that will help check that students have understood their talk and can use the information they've been given. (see 5.4: Problem Solving in Groups)

Good technicians, who know a lot, are not always good Communicators.
If you know it, but you can't share it, you can't teach it!

6. Making and Using Materials

6.1 Nazirou's Newspaper

It was nearly time for the elections. The towns were filled with posters, pamphlets, leaflets and the noise of discussion. Would the existing president win, one more time? Would his socialist opponent this time finally bring him down?

Nazirou, a student in the town, returned home to his village every four or five weeks full of the news. The socialist opponent had given a powerful speech, - he was asking the students to start a general strike, - he was promising great changes if, by chance, he won.

The villagers - since no-one owned a radio, depended on Nazirou's visits to hear what was going on. He would save up the daily newspapers and bring them back with him, translating headlines and articles from the French and showing photographs.

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Although initially Nazirou gathered information especially for his father, who, as a farmer wanted to know about proposed changes in the price of rice, everyone wanted to know what the two candidates were saying. As soon as Nazirou came home the villagers would gather in the courtyard of his parents home, asking questions, listening to him talk and looking through the photographs in his papers.

Though still young, Nazirou soon achieved the status of a story teller, as he translated what the reporters in the capital had to say. His parents were proud to have a son who studied in the town. Nazirou however felt it wasn't right that he was the villagers only source of information.

The election was important, particularly to the village farmers who were fighting to maintain a good price for their rice, and pretty soon everyone would be asked to vote. Nazirou felt they had a right to know more about what was going on. Although he was the only boy in the village who had been sent away to school many people in the village had attended a literacy programme, and could read in their local language, if not in French.

The following month, because of election meetings in the town Nazirou decided not to return to his village for the weekend. He thought he would try and translate some of the most important articles and post them to his parents house. Together with a few friends Nazirou sat up late at nights, carefully copying out headlines, translating articles into his first language and pasting on photographs. He took the finished product to a photocopier in the city and paid to have five copies made, which he parcelled up and sent to his father. He hoped they would arrive within a week.

When Nazirou went back to his village two months later, he was welcomed warmly, and people began to gather outside his father's house to hear his news. His father had thanked him for the pictures he had sent, and was very proud of what his son had done. But as Nazirou talked to the villagers he realised no-one had read any of them.

Nazirou was disappointed. He had spent a lot of time preparing them, and thought what he had written was important. 'Why is it' he said, when he had answered their questions, 'that you tell me you want to know about what is happening the city, and when I send you papers you don't read them?'. Finally a friend of his own age answered him. 'Nazirou', he said, 'we are not familiar with books and papers and study as are. We have always learned about things by

word of mouth. We don't know how, or where to read papers, they are not yet a part of our lives. The literacy trainer who used to be here showed us how to understand the literacy book. We were waiting for you to come home to tell us about your paper.

After reading the story of Nazirou think about
- why do most people find new ideas difficult to accept?
- is there anything that you take for granted that might be unfamiliar to the people around you?
- when was the last time you were introduced to something new that you found difficult to understand?
- what helped you to understand it and to use it for yourself?

Many field workers and trainers will at some time have had a similar experience to Nazirou's, of introducing something new, which they felt was important, and then feeling disappointed when they find it is not used. Too often the people themselves are blamed for not responding to the new idea.
Teachers will often blame their students for not coming up with the right answers, or for being unable to understand. It is important to remember that for people to understand and use something it needs to be properly explained. You cannot change people's habits and customs by substituting something that you feel is 'better', and immediately expect them to use it. You cannot expect people to understand something because you have told them once.
All too often we judge people against our own standards, and the values that we are familiar with, without putting ourselves in their position, and beginning with things that are familiar to them.

6.2 Choosing and Adapting Material

For every literacy trainer working with local languages there is the problem of finding sufficient material for people to read. In many traditionally oral languages there is a shortage of written texts, most of which have been produced by Literacy programmes.
Some languages use characters which are not found on a typewriter keyboard, others are transcribed differently in different regions, material is not immediately transferable from one area to another.
Students who have recently learned to read will not automatically understand unfamiliar characters or formats, they will need to be shown how to read. It will often be left up to the trainer to find and reproduce material of her own.
In Senegal we tried to build up a bank of suitable material. We carried out a survey in the villages to find out what people wanted to read about.

Trainers were allocated different subjects to work on and and given time to choose texts that could be adapted or translated. The finished texts were copied and shared out among the different groups.
Our main sources of information were:

- National Newspapers,
- Simple technical books,
- Agricultural suppliers,
- Other projects,
- Aid Agencies,
(particularly the volunteer agencies)
- Health posts

We also tried to pressure some organisations into producing documents in local languages.

When translating material

- Only use texts that are useful and relevant to the area you're working in.
- keep your language simple, and use familiar terms,
- keep your sentences short, up to about 20 words is enough,
- keep your paragraphs short, and leave space between paragraphs on the page,
- don't break words at the end of a line
- when [illegible]
- leave margins at the sides of the page, and top and bottom,
- when writing by hand try to keep your handwriting as similar as possible to the style of characters students are learning,
- use lined paper, or place a sheet of lined paper under your writing page to keep your writing lines straight,
- use headlines and underlined headings to make certain words and sections stand out. people who cannot read everything will gain confidence from reading a headline.

An oral culture communicates by talking. Books and papers need to be made a subject for talking about, as conversations can be made into books for reading.

Encourage people to read, and to talk about what they read.
Encourage people to talk and to write down what they've got to say.

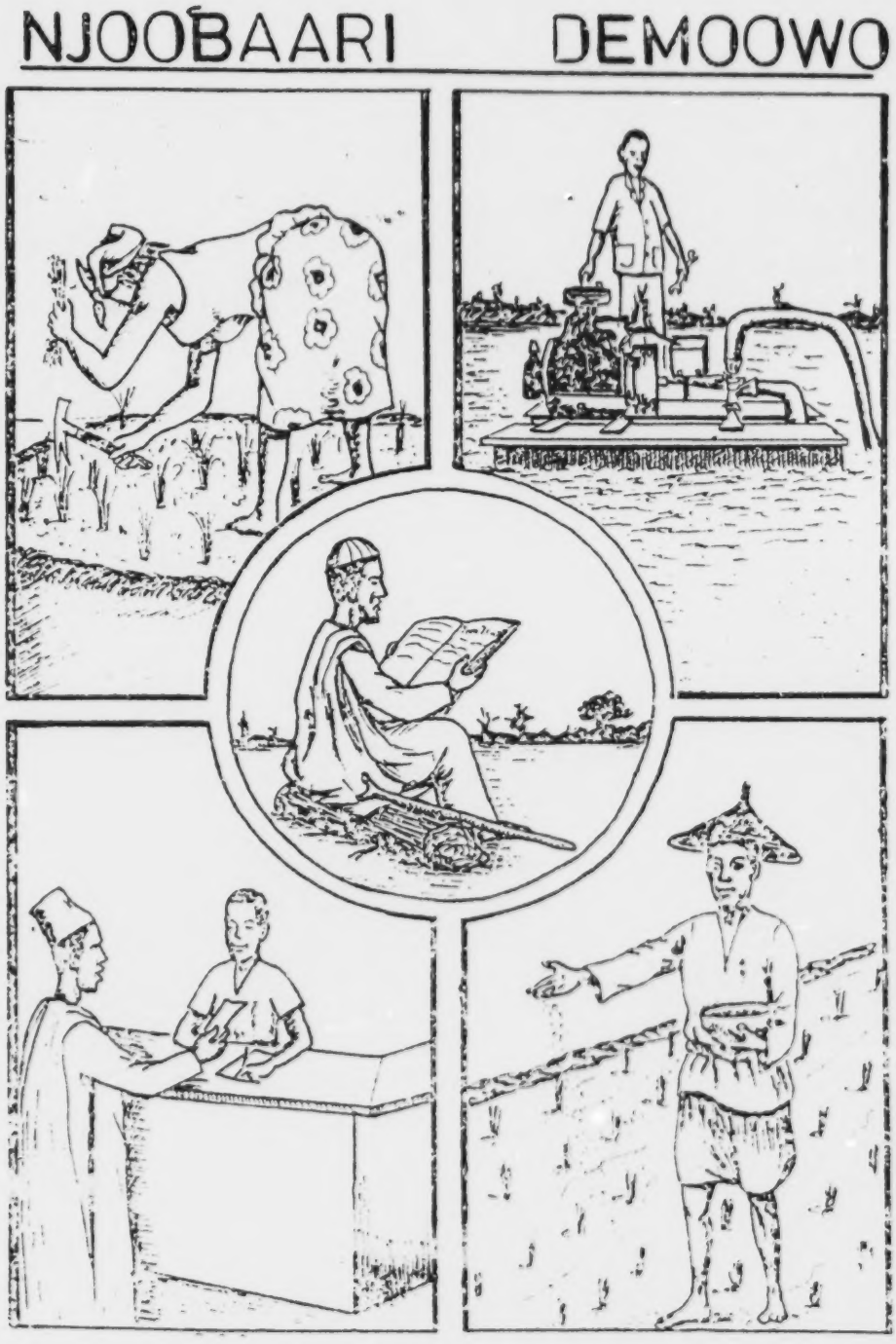
6.3 Creating a Workbook

An adult who has never been to school will have developed other ways of giving and getting information. On learning to read, people do not automatically see reading as a tool for discovering. All their lives discovering will have been done by imitating, listening, watching and trying. Even in learning to read it takes time in the beginning to spell out a word, a student can read a page without understanding the meaning of what he has read.
Other readers may understand what they read but find it difficult to relate the same situation to themselves. New readers need to be taught not only how to read but how to question and use written information.

In Senegal in order to help people respond to what they read we created a workbook of simple exercises. We wrote our own texts using subjects related to what people were doing. On every page we used pictures and questions, with spaces for students to fill in words or answer questions.
The aim of the book was to form a bridge between the learning of letters and the reading of texts. It involved people in active reading by asking them to respond to what they read. There was a section at the back printed on different coloured paper where students could check to see if what they had written was correct. By checking their own answers students could continue learning on their own, and at their own speed.
Because people had to think about the meaning of what they read it gave them practice in reading while helping them to learn something at the same time. It involved readers in using indexes, sections and page numbers, as well as understanding charts and tables. It posed questions to help students evaluate what they'd read and decide if it was true or important.
In many societies there is status in saying you know something, even when you don't. In others the written word has a certain power, - if something is written down it MUST be true. Both these beliefs are blocks to learning.

When encouraging students to read help them to:
- Begin with a question.
- Search in the text for a solution.
- Decide if there are certain cases when the information given in the text wouldn't apply.

We hoped the workbook would give students confidence in their ability not only to read, but to use books. We introduced it first into literacy classes and showed students how to use it, before encouraging people to use it on their own. Copies of the workbook, in French or Pulaar, can be obtained from:



The cover page of the workbook produced by
Projet Ile aMorphil, Cascas, Senegal

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Here are some of the exercises we used:

1. Filling in words.

a) writing out proverbs or familiar sayings, and blanking out certain words, the student was asked to fill in the gaps.

b) writing out a text and blanking out names of things. These words were given in a word bank at the end, students had to find the right word for the right space.

c) naming pictures, or parts of a picture or machine.

d) leaving blanks in a text, with a inserted for each letter of the missing word, this also helps students to think about how to spell.

2. Using information

a) a series of sentences are written out, the student has to decide if they are true or false.

b) questions are written with alternative answers, the student has to decide which of the alternatives is right.

c) information is given in a table, eg. an account book, students have to use the table to find out what different members have paid.

d) sentences or instructions are written down and muddled up, the student has to rewrite them in an understandable order.

There are many alternatives to the exercises above. The important thing is to play with words to create something that is both fun and meaningful.
BUT pre-test all your exercises before you use them to make sure they are clear.
Different people perceive things in different ways. If an exercise doesn't work, it is badly explained or doesn't fit in with the way people think, improve it or abandon it. Its the fault of the exercise, not the thinker.

6.4 A Rural Newspaper

Nazirou's experiment in the story at the beginning of this section was a first attempt at a local newspaper.
In many countries rural newspapers have begun to appear recording both national politics and local activities, some of them printed in two or more languages.
Newspapers have also been started on a small scale in a limited area, and formed the basis of a post literacy project.

By asking students to write articles it becomes an incentive to read and write as well as a media for information, and the basis for reading or group-led groups. It can also be a regular source of reading material for use in class.

Things to consider when starting a local newspaper:

1. Who will pay for it?
You can probably sell the paper for a small cost, but if it is too expensive no-one will buy it, and whatever the price, with the cost of paper and production you are unlikely ever to break even.
Is there an organisation willing to subsidise it indefinately?
Can you estimate an approximate number of readers and calculate how much subsidy is needed?

2. How will it be produced?
If it is to be produced in a language using characters not found on a typewriter keyboard, the paper will need to be written out by hand.
The use of a nomograph by an experienced draftsman is often clearer and faster than someone writing free-hand.
A good stencil machine will give a much cheaper method of reproduction than a photocopier, providing you can get stencils engraved locally.
Silk screen printing is often cheaper still, if there are facilities for making screens photographically.
Research all possibilities and prices before deciding.
Illustrations inset into the text will always improve it, but make sure they are simple and clearly drawn, (see section 6.5 on drawing and visual aids).
Try to find an illustrator living locally, working at distance brings its own complications in an area where communications are bad.
If you are able to use a printing process that will reproduce photographs clearly, they are generally better than illustrations. Using photographs allows you to include pictures of the actual people and events you are writing about.
People can recognise a photograph or find out more about someone without actually meeting him.
How often is it reasonable to try to produce it?
Don't be too ambitious at the beginning and then find you can't keep up.

3. What will it include?
National daily newspapers supply news on current events. Periodicals or monthly magazines usually include more general information or educational articles.
A local newspaper will probably try to do both.
By publishing once a month or every two months important news will probably have already been carried by other sources.

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Articles on agriculture or technical information can be planned in advance to appear at the time when they will be relevant.
Information on health and nutrition can be adapted from other sources, notices or announcements on cultural events should be carefully planned if they are to appear on time.
Many papers have regular 'pages' which appear in every edition such as a health page, a page for announcing events to come and a write up on events or meetings that have been held.
In a local newspaper the most popular pages are often the letters pages where readers write in letters to be printed.

4 Who will write it?
Articles can be translated and simplified from the national press, but most of them will be written locally.
Do you have a few people who will write articles regularly?
Do you want regular features, for example a health or letters page?
How can you organise students to write for the paper?
Who will plan and edit it and decide what goes in?
What proportion of information do you want to include, and what proportion of letters and general news?

5 Who will sell it?
How will you get the paper to the people who will read it?
What regular means of transport pass through the area?
Can you leave a pile of copies in each village?
Is there a literacy committee or one person who will take responsibility for them?
Who will collect the money for the paper?
Can you sell it to people who will resell it at a profit?
Would this work as a reasonable incentive to sell more?
If you have answers to most of these questions it might be time to try an 'experimental first issue' before you decide to launch into producing a paper.

The cover page 'Timtimol', (Rainbow in Pulaar) a newspaper produced by farmers in Senegal

6.5 Village Libraries

Different post-literacy projects throughout West Africa have experimented with the setting up of village libraries as a source of reading material for students. A library is a way of making documents available within a village, and can consist of anything from ten to a hundred books.
The success of a village library depends on it being properly introduced at the right time. The best time to introduce a library is when people are **asking** for things to read. In areas where there is a lot of material published in the local language, a strong cupboard will need to be built to house the books, which can be arranged according to their subject on the shelves.
In areas where there are relatively few documents, these can be housed in a suitcase for safe keeping and protection. Either way someone from the literacy committee will need to be appointed to take charge of the books.

In Senegal the library books were given by the project as a gift to the village. Borrowing was free to all members of the library, with a subscription of 200 CFA a year.

A charge of 250 CFA was made for any book that was lost, and 50 CFA a week for any book that was late. The money was kept by the committee and used to buy new books for the collection. Records of borrowers were kept on a list similar to the one below. A list of books was pasted to the lid of the suitcase in order to keep a check on what the library contained.
When books were lent out they were protected by a plastic bag and the reader was warned on how to store the book to keep it free from dust and termites.
Some villages used the library as the basis for forming a reading or a group-led group. They would meet together to discuss what they had read and to introduce other people to using the library and the different books it contained.

For people who have never used books before it is often useful to spend time showing them how to use a contents page or an index arranged in alphabetical order. For books containing information a group exercise can be organised on how to find information under different headings.

- Give students a book to use and present them with a problem.
- For example a book on nutrition, and the problem of a child of two refusing to eat solid foods.
- Ask them which sections they might look in for solutions to the problem.
- Go through the different sections if necessary, pointing out which might be useful, for example the section on 'building foods', or the section on 'weaning'.
- Read through the relevant sections and try to use the information to find practical answers.
- Ask your students 'now you have this information - what would you do?'

Showing people how to use books to find information will encourage them to use them on their own.
Discuss within the village how you might add to your library the sort of books the readers want to look for, and who might supply them. If it is to be a village library - involve the village in deciding how and where it is to be kept and build it up slowly.
Keep a regular check on who is using it and which books are being read.

'A library is a living thing, and needs to be kept moving. A box of books left with a sho introductory talk - like Nazirou's newspape won't work.'

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Example of Record Sheet for Borrowers

Date	Title of Book	Name and village of Borrower	Return Date	Remarks
3 July	Reading, Writing and Cultivating	Mamadou Faye. Abdullah.	15 July	Torn Cover.

6.6 Visual Aids

Most literacy trainers are familiar with using a picture in a literacy class to begin a discussion. Pictures used in this way make students think about something, and help to focus everyone's attention on the same broad area.
Some field workers use pictures to communicate with people who cannot read. Pictures used in this way help to explain a particular object or thing, or represent it in a more permanent way. Pictures, like written or spoken words, can communicate information or ideas.
Pictures used with words, in a written text or as an aid to a spoken explanation, give added information. They can help people to understand better what they see or hear.
People who have grown up without learning to read have usually developed a very strong visual memory. They rely on seeing and remembering to record important information. They will usually remember very accurately something they have seen. They will probably retain that memory for a long time. Trainers, introducing literacy to adults should make use of this ability.
The use of pictures, charts, photographs and actual objects have become important everywhere in teaching and learning.
The term 'visual aid' describes anything that can be **seen** (not heard or read) that is used to help someone understand.

but:
- People understand what they know, that is what they have seen or heard or felt before.
- We understand something new only when we can relate it to what we have seen or heard before.
- Just as we have to learn how to read, or to speak a new language, so we have to learn how to read pictures.
- Unfamiliar pictures will not immediately be understood by a group even if the objects in them are familiar.

Some advice on producing Visual Aids

A short course on blackboard drawing and instructions for making a flip chart are given in the annex of this book for easy reference. A flip chart is a series of large white sheets of paper, usually with drawings on them, that can be displayed in front of the class. The pages are turned over as each new picture is needed for the lesson.
A flash chart is a picture or word usually drawn onto a piece of card that is used to help explain something in a lesson. The advantage of a flash card is that pictures can be shown on their own or in different combinations or sequences.
The technique used in blackboard drawing can also be used for making flash cards and flip charts. The difference is that blackboard drawings are usually done quickly, within the class. Flash cards and flip charts can be prepared in advance. They can be drawn more slowly and carefully and used several times.
You can make some yourself following the technique given in the annex, or employ someone else to make some for you.

Line drawings are probably the easiest sort of pictures to draw and reproduce but are the most often misunderstood. If a line drawing is too simple it may not include enough information for a student to recognise it. If a line drawing is too complicated it can appear like a mass of lines to someone with poor eyesight. Include enough detail (eg. expressions on faces, patterns on clothes) to make it clear who a person is and what they may be feeling. Test your drawings by fixing them up at the front of the class and

walking to the back. Make sure they can still be seen by someone whose eyesight may be worse than yours.

Blocked or shaded drawings can seem confusing to people who are not familiar to the technique of reproducing light in a drawing.
The person in the picture below could appear to have a two coloured face or to be ill with a strange skin disease.

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Background, size and perspective figures drawn in the background of a picture could just appear small to someone who doesn't understand perspective. Similarly by drawing a tiny object, eg. a mosquito, large, in order to see it, will only be confusing. A mosquito is not as big as a woman's hand, and will not be recognised if it is drawn that way.

A car drawn with only three wheels showing may be seen as a car that only **has** three wheels.

Two people drawn close together in this way may look like one of them has only one leg.

A road drawn as if it is disappearing into the distance will probably be understood as a road that is getting narrower rather than receding.

Generally it is better **not** to include background or different scales of drawing on one page. Both are more likely to be confusing and take attention away from an object rather than adding to it.

Photographs are often more easily understood than drawings, but they are expensive to reproduce and can not be seen from a distance. It is not very practical to try and use photographs as a visual aid in a class. If you do use photographs pass them around the class first, so that everyone can have a proper look at them.

Before producing a series of drawings for use in class it is a good idea to do some individual tests with a small number of students. Show your drawings to different students. Ask them what they see in different parts of the picture. Try not to give away any information and wait to see what they can recognise. If, after several tries, a student cannot recognise a picture, it is probably not clear enough and should be redrawn.

Some advice on using pictures

1. Introduce a picture you are going to use with either
a) questions
- what can you see here?
- what do you think they are doing, feeling?
- what is that on her head, hand?
- where do you think she is going?

or by statements
- this is a woman
- can you see her face
- she's looking tired
- she's carrying a large bundle on her head
- it looks like firewood
- she's been walking a long way

Introducing a picture with questions will draw out what your students see. Introducing a picture with statements will direct attention towards the point you want to make. Both are useful at different times. If people don't understand a picture they can be shown what is in it by step by step explanations.

2. Using a long stick as a pointer to indicate different areas of a picture allows you to stand away from it so you don't block anyone's view.

3. Beware of using pictures or flash cards from other areas. People will soon notice if something

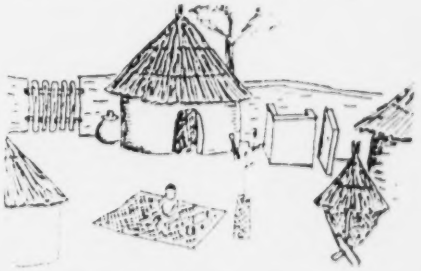
is unfamiliar to their own situation. If a picture shows different types of clothes, houses or cooking utensils people may not relate the message it conveys to themselves.

4. Pictures can be used:
a) on their own, at the beginning of a class, to build up an imaginary situation.

eg. here is a man weeding a garden
how often should you weed a garden?
what can you put on a garden to stop the weeds growing?
what are the advantages of doing this?
what are the problems?

b) in pairs or as part of a sequence to build up a story or to demonstrate a process.

1



2

eg. what is the difference between picture 1 and 2?
which situation is better?
what changes have been made?

5. Pictures can be used as a stimulus to writing. Once a picture has been clearly introduced you can ask students to 'write down everything they know about it', or 'write down all the words they can think of relating to it'. You can then go on to discuss their ideas and correct their written work.

6. Flash cards are a good way of revising issues discussed in earlier classes. (see 4.6 Methods of revision). Using the same picture again at a later date helps to trigger ideas and brings back information learned in the first class.

7. Pictures, turned into posters are a good way of reminding people to do things. When you have learned about something during a lesson students could be involved in making a poster on the same subject, to keep the message in their heads.
Posters can be used to decorate a literacy centre or people's homes.

8. Pictures are only one form of visual aid. Sometimes it is more useful to bring the object itself into the classroom (eg. a part of a motor pump,) or a related object (eg. a bicycle pump) to help make something clear. (eg. how a pump works).

A Letter Chart
The letters of the alphabet, drawn onto a chart and hung in the literacy centre, provides a constant reminder of the different letter shapes. It can also be used to correct students work, or for students to correct each other. It helps students to identify the different sounds they hear in a word and to relate them to the letters that depict those sounds.
Every letter and its sound should have been learned in the literacy class, in a post literacy class they will need to be constantly revised.

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On the page opposite is the chart we used with the halpulaar in Senegal. It represents every letter in the pulaar alphabet. We grouped the letters according to their different uses and sounds. Consonants were separated from vowels. Short and long vowel sounds were placed next to each other in two different columns. Double consonant sounds were placed together in one column. The other consonants were placed next to the ones they sounded similar to. A space was reserved for simple punctuation, which also needed to be learned and revised.

When making a letter chart

- Ask your students to sort out the letter sounds and arrange them into different groups.
- Ask them where on the chart they would like to place the different letters.
- When teaching a new word it can be spelled out on the chart before writing it down.
- When students make a mistake in spelling a word or recognising a letter they can use the chart to identify their mistake.
- If students are involved in making the chart and organising the letters they will understand it better.
- If it is understood well it can be a useful way of recognising letters and correcting words without relying on a trainer.

ALKULE PULAAR

Odon mbaawi jaŋŋgude alkulal yoo alkulal?

P	b	c	j	ɓ	nd	i	ii
t	d	r	y	ɗ	mb	u	uu
k	g	m	n	y'	nj	a	aa
f	w	s		ŋ	ŋg	o	oo
h	l	' / .	?	q	ñ	e	ee

A letter chart for the Pulaar alphabet.

6.7 Rods and Tallys

Non-literate cultures have usually developed their own way of recording information. One of the most common of these is the tally stick. A tally is a stick with notches cut into it. The different notches mean different things.

A farmer might use a tally stick to record the number of sacks of grain he has harvested. Each notch can be used to represent one sack. Each time a sack is filled another notch is cut.
A different tally can be used each year. The tally representing one year can be compared with the tally representing the previous year. By looking at the notches in each stick the farmer can see whether his harvest has improved.

Another example is the use of beans to represent an amount.
A farmer in Mali used beans and two cups to record the amount of furrows in his field that he had sown with seed. He used one bean to represent each furrow. He used one cup to represent the unsown area, and one cup to represent the sown area of his field.

Every time he sowed a furrow with seed he transferred a bean from the 'unsown' cup to the 'sown' cup.

By comparing the two cups he could see how much land he had sown and how much he still had to do.

A similar principle is used in the making of beads and jewelry. The different coloured beads threaded onto a necklace can give different information about the person who is wearing it. In some cultures one colour is reserved for unmarried girls, another for first or second wives, with different colours to represent their children.

The idea of using a small or simple object to represent another object or to convey information is common to most societies. The same principle can be adapted into a useful teaching tool.

In Senegal we used a series of rods to help explain to farmers how to use a revolving fund. The revolving fund was a means of credit offered to co-operatives to enable them to buy inputs. An amount of money, calculated according to the amount of land the co-operative owned, was given to the group. The money was to be placed in a bank account and used to buy fertiliser and pesticide. After the harvest the money had to be repaid into the bank, so that it could be re-used the following year. At the same time the farmers were asked to pay a percentage of the total amount into an insurance fund.

In order to operate the fund there were a number of important steps that had to be learned. To help them understand and remember the different steps we demonstrated them using rods made of different coloured blocks of wood.

The largest rods represented the initial amount of money received - 70,000 I C F A per hectare. One large rod represented each 70,000 I C F A. An area was drawn onto the sand to represent a bank. The large rods were placed into the bank. Another area was drawn to represent a supplier of fertiliser. Rods (money) were moved from the 'bank' to the 'supplhers' to represent the buying of fertiliser.

Other areas were drawn to represent supplhers of pesticides and the insurance fund. As the process was explained the rods were moved between the different areas. Farmers placed smaller rods of their own into the insurance fund.
After demonstrating the process to the farmers they were then asked to go through the different steps themselves.
Using the rods as an actual visual reminder it was easier for them to see which steps they had forgotten. The trainer could also check how well they had understood.

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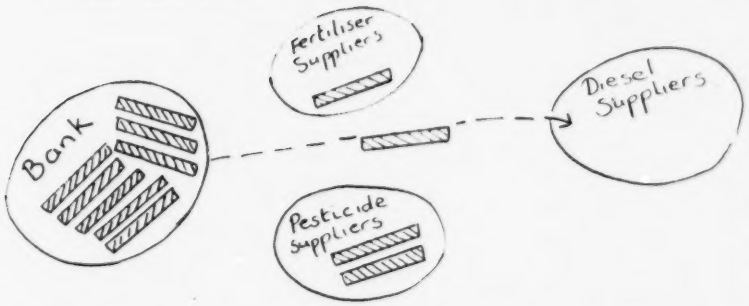
Once the group had been shown a rod and told what it represented (eg. 70,000 FCFA) that meaning became attached to it.
When an area was drawn on the ground and called a 'bank', students understood that it represented a bank. We tried to make some relationship between the object and the thing it represented. We used gold coloured rods for money. We used smaller rods to represent percentages of that amount. The bank was drawn as a larger area than the suppliers, the suppliers were drawn close to each other.



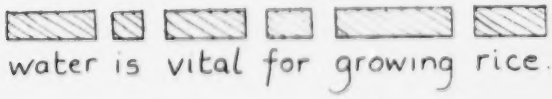
The rods used were part of a specially prepared box. There were twelve different lengths, ranging from 1 to 6 cm. Each length was half a centimetre longer than the one before, and a different colour. (eg. all the rods of 1 cm were white, all the rods of 1.5 cm were red) There were several of each colour.
A trainer working in a rural area can make this own rods using different lengths of stick. The different lengths should be clearly recognised apart from each other. This can be done by painting them, or by cutting notches in the end. Beans, small stones, gourds, coloured beads or any small objects can be used instead of sticks. We called objects used in this way 'tallys'.

When using rods or 'tallys'

- Ask everyone to sit in a group around you, it might be easier on the floor.
- Hold up each object in turn so that everyone can see it.
- State clearly what that object represents.
- Ask the group to repeat it.
- Go through every object again.
- Ask a student to name the different objects saying what they represent.
- Go through your story, pointing to each object as you mention it, and moving it where necessary.
- Check that everyone has understood.
- Ask a student to go through the same story again using the same tallys.

Rods or tallys can be used to demonstrate a process. They can also be used to tell a fictional story.
In a post literacy class students can be asked to write down the process or story after it has been told, using the tallys to remind them of the different steps involved. You will probably find the students concentrating on the different tallys to try and remember their place in the story.
In a literacy class where students are less able to write, rods can be used to represent the different words in a sentence. One rod is used for each word, with long rods for the long words and shorter rods for the others. The sentence is spelt out by placing the rods in the right order on the ground, drawing attention to the divisions between words.

- Hold up the first rod and say the first word of the sentence.
- Repeat the words and ask your students to repeat it. Lay the rod on the ground in front of you.
- Hold up the second rod and say the second word.
- Repeat it and lay it on the ground next to the first rod, leaving a small space in between to represent the break between words.
- Continue with every word of the sentence until you have them in a line in front of you.



- Ask a student to repeat the whole sentence.

- Ask everyone to write it down.

- Correct their work by holding up the rods one at a time and spelling out the word.

- Give people the rods they have mis-spelled and ask them to try again.

- When everyone has corrected their work rearrange the rods into a different order to make another sentence.

- Add more words if necessary, using a rod to represent each word.

- Ask the students to write down this new sentence.

- Ask students to make different sentences of their own.

In a numeracy class tallys can be used to represent different numbers or amounts.
Students can learn to count, add, subtract and multiply using small sticks or round stones.
Problems involving amounts can be acted out, using tallys to represent money or sacks.

eg.
A man goes to buy 4 sacks of millet.
He has 16,000 FCFA (one tally can represent 1,000 FCFA)
The seller asks 5,000 FCFA for each sack.
Has he got enough money ?
He decides to bargain with the seller, what is the MOST he is able to pay for each sack ?.

Rods and tallys are useful to a trainer because they are similar to traditional ways of remembering. Too often trainers depend on ideas from outside a community, which are unfamiliar to the people who have never been to school.

Every community has its own traditions customs and proverbs. Some can be adapted to help people learn new things. Some are blocks to learning. Look carefully at the traditions of the people around you. Which ones could you use?

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7. Village Projects

7.1 The Health Talk that became a Village Event - a final story

Fatimata was a health worker working for a small, voluntary organisation in Africa. Her job was to travel from village to village giving talks about a new disease that had been discovered. The disease was fatal, there was no cure for it, and unless people were careful it could spread fast.

Fatimata's organisation were trying to inform people about the disease. They employed health workers to talk to people about how it was caught, and how, by changing certain habits, they could avoid it.

Fatimata would arrange her talks at the edge of the market place in the mornings. She tried to attract the attention of groups of women after they had finished their shopping and to talk to them about the disease. She tried to tell them that if they didn't change this or that about their lives, they too could be in danger, and so could their men. But very few people listened. Mostly the women were too busy to stop and hear what Fatimata had to say, and those that did listen didn't really see how they could change.

Alysan, the village literacy trainer, heard her talking and noticed how few people were listening to her. He asked her if she would like to come to the literacy centre in the evening and talk to his group. There at least she would find a dozen people who would be ready to listen, and who were used to discussing things during their meetings. Alysan suggested she might find it easier than trying to talk to people in the market place.

That evening Fatimata went along to the class. She explained to people about this new deadly disease that was already spreading in other parts of the country. She told them how to recognise it in other people, how it was spread, and how, if they changed certain practises, they could avoid it.

At times, if her talk was not understood, Alysan helped her to explain to the class. He used the blackboard to draw diagrams showing how the disease could be spread from person to person. Then he showed how, if everyone was careful, they could prevent it from spreading in their area. The class became interested and very concerned. The students felt it was important for everyone to understand if they were to protect themselves and their families, and discussed ways of helping the health worker inform everyone in the village.

One of the students suggested using the diagrams that Alysan had put on the board to make posters for the village. Another suggested writing a song about it that the griots could sing. A third student suggested writing a play about a man who caught the disease in the city and came back to tell his wife.

The following evening the same group gathered in the literacy centre to work on some of these ideas. Some of them brought with them pens and sheets of paper to make posters and another group sat together to talk about the play.

The idea for the play was good, but the students were nervous about acting in front of a lot of people. They felt the villagers might be angry with them if they started asking them to change certain customs. No-one wanted to act as the man with the disease. Then someone suggested turning the play into a puppet show. They felt that if they made and used puppets to act out the story no-one would have to play the difficult characters, and no-one would have to give advice. They could remain anonymous and let the puppets do the talking.

Everyone was enthusiastic, but no-one knew how to make puppets. They went to see the woodcarver and explained the idea to him. He offered to make some puppets, but asked them to go and see the tailor about making the clothes and providing some sheets of material for the theatre. So someone else from the group went to see the tailor and explained the idea to him.

Soon many people from the village were involved. The blacksmith offered to make some rods for the puppets arms, some musicians offered to play before and after the show. As more and more people heard why they were putting on a show, they too became concerned and wanted to help. The more people heard about it, the more they wanted to see it.

Eventually they decided to use the posters they were making to advertise the show. The literacy centre became a puppet making room and then a rehearsal room. The village wrestling ring was turned into a temporary theatre. Tickets for the show were sold in advance, and then again on the door. People came, not only from their own village but from two or three other villages in the area. They sold so many tickets they put the show on four nights running.

The puppets were so funny that the audience laughed a lot. They joined in and shouted at the characters they didn't like, they cheered and gave support to the woman whose husband was

ill. They danced to the music and sang along with the songs, but they also remembered the message and discussed how similar the story was to their own lives.

The treasurer of the literacy class collected the money from the tickets. After he had done his accounts and they had paid for all the materials used to make the puppets, they had 3,000 FCFA left. They held a meeting to discuss how it should be spent. They decided to donate half of it to Fatimata's organisation, so she could continue working in other villages telling people about this new disease. They kept the rest to finance a new village project, and discussed during their classes what they could work on next.

Since the puppet show the literacy class had grown with many new people dropping in to the centre. Some came to enrol as students, others came to talk about the play, and the information it had given them. Alvsan found that the centre changed from being a classroom to being more of a social centre where people came to exchange ideas, to discuss problems and to work out new plans.

Word of the puppet show spread through every village in the area, and with it Fatimata's message. As she went to work in each new place so people greeted her warmly and were ready to listen.

After reading this last story, ask yourself:

- what the villagers gained from getting involved with Fatimata.

- what the role of the trainer was in starting up the activities.

- what sort of projects might be successful in the villages where you work.

7.2 Setting up Village Projects

The story of the health worker shows how everyone can be involved in an activity from which the whole village can benefit. This particular village benefited in many different ways:

- they learned how to work together for a unified aim and on a project of their own.

- they learned a lot more about the spread of diseases and how they could be avoided.

- they practised and developed a number of new skills such as constructing a play, making puppets and a theatre, producing posters and keeping accounts.

- they gained a lot of confidence in talking about difficult problems, in speaking in front of other people, and above all in themselves.

- they earned a small amount of money and were encouraged to go on to try to earn more in other ways.

A village project is an activity which involves as many people as possible and benefits the whole community. It can be set up in or around the literacy centre turning the centre more into a community or social building and bringing in people who may not be part of the literacy group. It may encourage other people to join the literacy classes, it will certainly involve using skills learned within the classes in a very practical way.

A village project can become the stimulus for group-led-groups. Once a trainer has initiated it he need no longer be the leader or director of the project. His role may be one of organising or providing materials or helping to get other people involved.

The group may want to appoint their own leads from within the village, or they may choose to elect a committee of different people giving out a particular task.

Though a trainer will help set up and organise a project, what to do and how it should be done will ultimately be decided by the people themselves. The aim of a village project is to use the skills learned in the literacy classes to produce

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something that will be of use to the village as a whole.
Here are some ideas for village projects that have been used in the past.

7.3 Organised Theatre and Puppetry

Organised theatre, or plays produced in front of an audience can easily grow out of ideas for role plays used in class. (see 5.5: Role Play). They are a good way of involving many people, even those from outside the literacy group in deciding on the story, in acting, arranging a place, fixing lighting, collecting costumes and setting up a stage.
Above all they are a very effective way of conveying information to large groups of people, in a way they will understand and remember.

A youth association in Senegal produced a play about the effects of the new dams in the River Senegal. The play gave information about how the patterns of flooding in the river would change. The association toured the villages on the banks of the river where farmers owned land that depended on the river flooding. They tried to make the farmers aware of how the dams would affect them and of the rights they had to the land they owned.

A farmer's association in another area produced a play about the value of literacy in managing co-operative funds. The play told the story of a co-operative where no-one kept any records of member's subscriptions. There were constant arguments about who had paid what. The play was very funny but it had a serious point to it. It aimed to encourage people to learn to read and calculate and to remind the village of the importance of record keeping.

Before deciding to produce a village play it is important to generate as much enthusiasm as possible. A good way to do this is to Brainstorm ideas, (see 3.5: Aims of a Course). Brainstorming involves getting as many people as possible to suggest as many ideas as possible and then working through them to sort out the best.

Making up a Play

- Decide what message you want to convey. (Is it to spread information - eg. the effects of dehydration, or to teach people how to do something eg. how to make a rehydration drink ').

- Does it include information and teaching ' (Try not to put too much information into one play, give people one strong idea to go away with).

- Decide on a story or situation that the message can be built around. (It is useful to brainstorm ideas for a story, local stories, proverbs or legends can often be adapted).

- Who are the main characters in your story '

- What is special about the personality, clothes, voice and manner of each character '

- Who would be the best person in the group to play each character '

- How can you make your play funny and memorable ' (As long as the main events in the story are clear to all the actors it may not be necessary to write all your lines.
Try to build your play around what you feel each character would say in that situation. After several practices the lines should be come more or less clear).

- Does your play have a good beginning and a good ending ' (Include a lot of action as well as talking).

- What parts of the play do you want to emphasise '

- Will the message be clear to everyone ' (Practice the play several times and ask a few people to be your audience. When they have watched the play ask for their advice on what could be improved).

- Do you want to include music, songs and dancing '

- Who will come to watch the play ' (Do you want to advertise it or to sell tickets ').

WARNING

If your play is political or gives important information make sure that the information in it is fair and correct. It is very dangerous to give people wrong or misleading information. Consider also how you might help people after the play who want more information about what you have told them. Think about where they might get further advice.

The best time to put on a play may well be during the evening or after it has got dark. Plays also generate a lot of interest and many people may want to attend. This will create problems of lighting the play and raising the actors up so everyone can see them.
Information on constructing a stage and lighting in areas without electricity are given in the annex.

Puppets

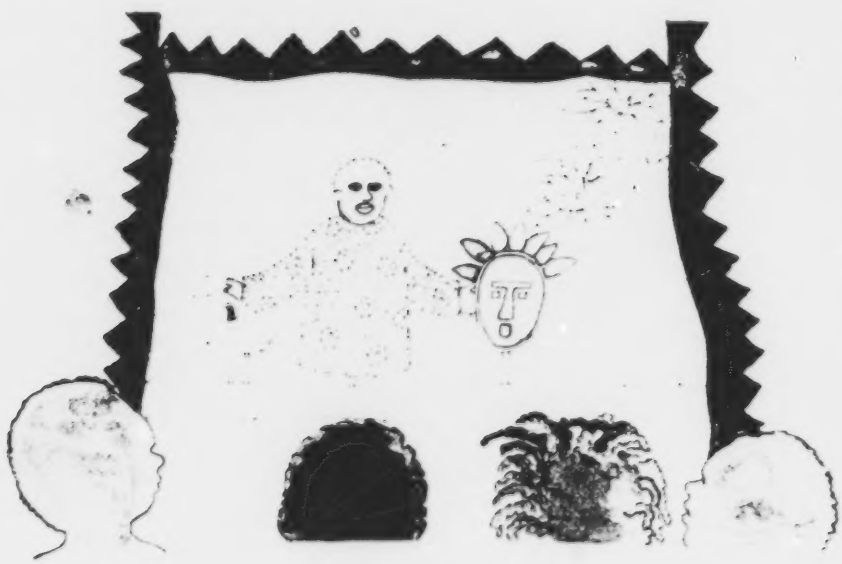
Some cultures feel worried about talking over difficult or personal issues in public. Some individuals feel shy about acting in front of large groups of people. In the story at the beginning of this section the group decided to use puppets to act their play instead of people.

In some areas puppets are seen as childish and are not taken seriously. In others, particularly where there is a strong tradition of puppetry, they can prove easier to use and be far more effective in the message they convey.
Puppets can say things that people might find difficult to say and are therefore more powerful than a group of actors. The audience can identify with them, laugh at them or ridicule them and still see them as separate from the person who is operating them.
They are more flexible than people, one person can operate several different characters and each character can be specially made to demonstrate something about the person it portrays.

(For example - a person without food can be made extremely thin, the fat person can be made enormously fat with a very wide smile.)
Puppets are everybody and nobody. They can make fools of themselves, laugh, sing, dance, be informative or clever and the audience will laugh and be entertained by them. They can convey important information without appearing to criticise their audience or to preach at them, and will appeal directly to their hearts.
People usually remember things they enjoy. A puppet show can carry information into the lives of many people.

Rod puppets were used in Sudan to tell people about the dangers of cutting down trees. A touring puppet company produced a play about a tree spirit that lived in a forest. As the forest was gradually cut down for firewood the tree spirit moved constantly from tree to tree to escape the woodcutters axe. Finally there was only one tree left standing. A small boy came to graze his goat on the tree and the tree spirit jumped out in fright. He told the boy all about the forests of the past, and how the land would change now that they had gone.

There are many different sorts of puppets. Some are worn on the hand like gloves, others are operated by strings or rods. Still others are made out of flat card or leather and used in front of a source of light to create shadows on a screen.
Traditional puppets, like traditional songs or stories, can always be adapted to carry new messages. New puppets can be made within the village using local resources.
In Senegal we found rod puppets were the most effective. They are easy to make and are large enough to be seen at a distance.
Designs for making a rod puppet and constructing a simple puppet theatre are in the annex of this book.
Advice given above on writing and putting on a play using actors will apply in very much the same way to a play using puppets. Further information on making and using puppets can be found in Gill Gordon's book 'Puppets for Better Health' available from
'Teaching Aids at Low Cost'
Box 49, St Albans, Herts,
U.K.



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7.4 Recording Local Information

Once people have learned to write easily, and to use local libraries, they may start wanting to record information of their own. The lives of important people, the history of the village, local plant remedies for sickness that have proved to work or traditional songs or stories, - all can be written down into books for future generations to read. These books can be added to the village library and provide reading material for the rest of the group.
Recording local information usually involves more than one person. A group can set out to collect stories or proverbs, or to interview older people about the remedies they know and trust.

In Tansania a village built up its own book of stories by interviewing the village story-teller. She was asked to tell her favourite stories onto cassette tape. The tapes were played back to her and the story teller was pleased and flattered to hear her own voice. It also gave her a chance to check if there was anything she wanted to change.

The literate people in the village then used the tapes to copy down what the story teller had said. The stories were bound together in a book so they would not be lost, and were kept as a way of preserving the stories so they didn't die out with the story teller.
Passages can be translated from French or Arabic into the local language, involving a translator and a writer working together.
Records can be made and kept of births, marriages and deaths in the village. Even if the information is hand written, as long as it is clear and well spaced on straight lines it can be used and understood by other people.
Texts can be written directly into ready made books or individual sheets can be bound into books for safe keeping.
Instructions for making and binding books are given in the annex of this book.

When Recording Local Information

- begin a new page for each new item or chapter.

- leave margins at the top and bottom of the page and at each side of your writing line.

- leave plenty of space, paper may be expensive but a page without space is difficult to read.

- when keeping records remember to leave empty pages for information to be added later.

- ask someone's permission before writing down information about them or information they have given you.

- protect your books in plastic bags or a box, away from damp, dust, termites and the sun.

In Senegal a class set out to make a book of local proverbs. Each student chose one proverb and wrote it down with an example of an experience in their past which illustrated the meaning of the proverb. Everyone completed one page of writing, some students included illustrations.

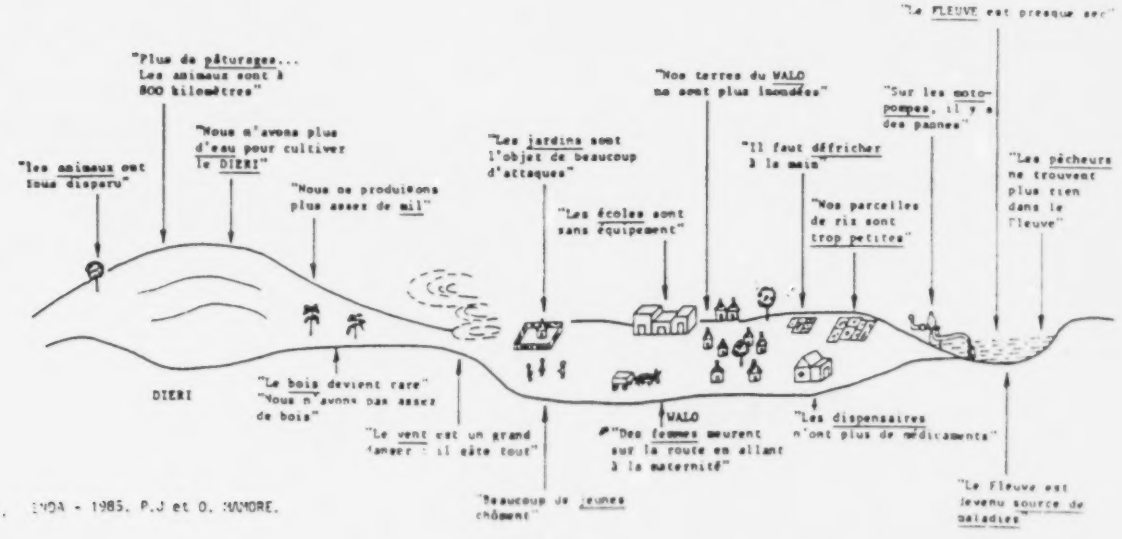
The separate pages were bound together in a book. It began as a class activity but grew into a project that included the whole village. Soon everyone wanted to add a proverb and a situation in their life when the proverb had proved to be true. Students wrote down the stories and proverbs of others who couldn't write. People who enjoyed drawing pictures added extra illustrations. The book became an important part of the village library.

In the same area there was a programme for the development of women's vegetable gardens. Field workers were introducing new types of vegetables into the gardens and teaching women how to cook with them. They were also teaching more about the nutritional value of different vegetables and how to make up a balanced diet. The women decided to put together a recipe book on the preparation of different foods and how and when to eat them. The book, because it grew out of the information given to the women and discussed with them, and included their own ideas on food preparation, was far more useful than any ready made book they might have been given.

In Burkina Faso a village decided to produce a map showing the different houses in the village, the wells, the shops, the gardens and different people's land. They used the map to refer to when they wanted to discuss changes and developments in the village, it made it easier to decide where they might expand the gardens and where they needed to construct a new well.
They then produced another map of their ideal village, plotting on it things they would like to have, this included a community centre, a water tower and more trees. They used the second map to show people what changes they would like to make. As soon as people had a vision of how the village might be they were encouraged to work towards developing it.

On Ile a Morphil in Senegal the following two maps were made by the farmers. They were produced during a conference in 1984 when farmers from different areas got together to set up an association and to discuss common problems. A lot of the discussions concerned environmental changes and how they could best deal with them.

Together the maps give information about these problems and some of the solutions they have found.


"Le FLEUVE est presque sec"
"Plus de pâturages... Les animaux sont à 800 kilomètres"
"Nous n'avons plus d'eau pour cultiver le DIERI"
"Les animaux ont tous disparu"
"Nous ne produisons plus assez de mil"
"Les jardins sont l'objet de beaucoup d'attaques"
"Les écoles sont sans équipement"
"Nos terres du WALO ne sont plus inondées"
"Il faut défricher à la main"
"Sur les motopompes, il y a des pannes"
"Nos parcelles de riz sont trop petites"
"Les pêcheurs ne trouvent plus rien dans le fleuve"
DIERI
"Le bois devient rare" "Nous n'avons pas assez de bois"
"Le vent est un grand semeur : il sème tout"
WALO
"Des femmes meurent sur la route en allant à la maternité"
"Les dispensaires n'ont plus de médicaments"
"Beaucoup de jeunes chômeurs"
"Le Fleuve est devenu source de maladies"
ENDA - 1985. P.J et O. MOORE.

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7.5 Using Music

In Africa music is very much a part of everyone's lives. From the songs of the griot, the tam tam round the fire to cassettes made famous by local musicians - everyone at some time learns to play. In Senegal we found many ways to incorporate music into a post- literacy group.

We collected traditional songs by talking and listening to the songsters. These were written down and compiled into a book by a group of students. Some were adapted to incorporate new messages.

We set the alphabet to a beat and chanted it with accompaniment from the tam tam, to help groups of children learn the names of the letters. Once it was turned into a song it became much easier for them to remember, and they would sing and clap along to it.

We worked in a group with a cassette recorder, playing the songs of modern musicians who sang in the local language. One person operated the cassette recorder, another offered to write on the blackboard, everyone else acted as listeners. The cassette was played through phrase by phrase and the listening group would try to make out the words. Every now and then they would ask to stop the tape, and repeat the words to the writer who wrote them on the board.

The whole group was responsible for helping the writer to get the words correctly spelt on the board. Sometimes the students asked for the tape to be rewound so they could check a phrase by hearing it again. When they had a complete version of the song on the board everyone copied it down. This was a good exercise in writing and spelling but it was also a way of learning the words of songs. Students would often then go and teach the words to other people. When the cassette was played everyone would sing along with it.

Many of the songs had a political or social significance. By listening carefully to every word and working out the lines, people could understand the meaning of the song and remember it.

7.6 Introducing a System of Book-keeping

One of the most valuable projects a post-literacy course can introduce into a village will probably be a system of book- keeping. Farmers wanting to manage their own co-operatives or groups wanting to market their produce need to understand and use accounts.

Throughout history reading and writing has been associated with trade and the need to keep records of produce sold at a distance.

Today one of the most important reasons for becoming literate is still trade and the buying and selling of goods. A post-literacy course is often built around the introduction of book-keeping.

It will not usually be up to the post-literacy trainer to set up such a system. This will probably be done by the project manager or the farmers advisor, or the co-operative may decide to ask for legal help from a local expert. It is the trainers task to introduce that system and to help people understand how and why it should be used.

The keeping of proper accounts is an important aid to good farm management. Recording the amount of money spent on the cultivation of a crop, amounts harvested and any money gained from selling it, will help farmers to make decisions about what to cultivate and what to sell. Even in areas where crops are grown mainly for local consumption records will help farmers compare yields between different varieties and to see the value of spending money on fertiliser.

Within a co-operative book-keeping is necessary to organise the combined buying of inputs, to record amounts used and to share costs. A village may have its own system of recording loans but subscriptions and repayments are made clearer to everyone when they are written down.
If the co-operative is dealing with loans from outside agencies, book-keeping becomes legally necessary. Though the agency or bank may use the national language of the country, this will probably be understood by only a few of the co-operative members. A co- operative needs its own internal accounts that can be followed by everyone within it. Mistrust will build up when people are confused about how much they have to pay or where their money is spent.

What sort of Accounts do Farmers need?

For people involved in cultivating there are three main areas where book-keeping will be used.

1. To record the supply of inputs and means of production

2. In the management of the water supply, - principally in the management of a motor pump.

3. For the weighing, storing and selling of produce.

The number of papers necessary for each of the three areas will vary according to the type and means of production. In order for people to understand them easily it is important to keep them as simple as possible and to use the minimum number of different accounts.

Some of these might be:

1. To record the supply of inputs and means of production.
a) an order book to list supplies purchased
b) order forms to send out to suppliers
c) a cash book to record individual subscriptions or repayments
d) records of the quantity of inputs used by individual farmers
e) a cash book showing the balance of funds for the whole co-operative

2. Management of water supply (especially in cases where a pump is used).
a) a cash book to record the buying of diesel, oil and filters for the motor pump
b) a log book for the motor pump (to record the running of the pump and amounts of oil and diesel used)
c) costs and labour for the upkeep and repair of irrigation canals
d) records of a 'sinking' or depreciation fund for the eventual replacement of a motor pump or other durable equipment

3. To record weighing, storing and selling of produce.
a) records of the weight of produce harvested by individuals and the co-operative as a whole
b) amounts of produce from individual farmers bought or stored by the co-operative
c) costs of transport and method of dividing payment of transport
d) cash book showing the balance of profits received from sale of produce, minus transport and other costs involved.

It may not be necessary to keep different account sheets for all the above functions. Certainly when introducing a system of book- keeping it is best to begin with only the most important.
Farmers were questioned in Senegal about those they felt to be most important. They mentioned, above all, a cash book for the whole co-operative and a list of individual subscriptions due to the co-operative and to the sinking fund.

What sort of Language should be used for Accounts?

Many of the words relating to the keeping of accounts do not exist in tribal languages and new words for such terms as cash book, sinking fund, credit and debit will have to be found.
In some cases words have simply been adapted from the national language (diesel, - 'gas-oil' in French, became gaswaal in Pulaar, a 'fond d'amortissement' in French became mortimaar in Pulaar).
At other times a paraphrase or explanation of the word is clearer, ('exigible' in French became 'that which one has to give back' in Pulaar).
Whatever solution is found, it is important to use words that members will understand and recognise. People often have their own way of referring to, for example, varieties of seed or types of fertiliser, using a description of it rather than a name.

The terms eventually chosen will need to be:-

a) short enough to appear at the top of a column in an account sheet.
b) understood by everyone or easily explained.
c) unchanged once they have been decided upon.

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Similarly units of weight and measurement used in co-operative records should, where possible be that most familiar to farmers and the one used in dividing up the land. (eg. would it be better to fix subscriptions per hectare or per field?). When dealing with outside agencies or commercial firms it may be necessary to use standard units of measurement, but a trainer should take care to relate these to the way a farmer measures his own area of land.

How should farmers be Introduced to Book-keeping?

Before teaching people how to keep accounts it is important to help them understand why they need to do so. Recording the time and money spent in production in order to make decisions about what to cultivate will be new to most co-operative members. If they are to gain from the services of a co-operative they need to understand how their subscriptions are spent and the risks involved in, for instance, buying fertiliser or taking loans.
In Senegal we began by introducing farmers to the use of a personal account sheet. This was a record sheet kept by individuals of hours worked in the field and any money spent on their crop. The total number of sacks harvested and any money gained from selling produce was also recorded on the same sheet.
It looked like this:-

Filling in a personal account sheet gave every student practise in keeping records. At the end of the season calculations could be made on the total amount of money and time spent on the cultivation of different crops. This could be compared with the harvest, and the amounts of money and food that had been gained.
It could also be compared to the yields of farmers using different varieties or different agricultural practices. Farmers could see for themselves that, though it might be more work to cultivate rice than maize, the selling price was significantly higher.
We compared profits to be gained from selling rice or maize and discussed how the market price might change in the future. We calculated a minimum price for both crops, below which cultivation might not be worthwhile.
Farmers discussed what they felt was a good selling price and whether it was better for them to sell more rice and buy sorghum, which was cheaper, to eat, - or to store their rice and sell it at a time when the price was higher. They also looked at different amounts of fertiliser and pesticides used, and worked out whether the money spent on them was justified by a better harvest.
Using a personal account sheet helped farmers to understand for themselves that the decisions they had to make regularly could, in part, be calculated. By calculating possible profits they could choose how to spend on inputs and prepare for possible losses by savings or an

Dañal moni kala
(Fiche individuelle)

jettooje _____ kampaañ _____
(nom) (campagne)

ñalŋgu	ñaldi gollaadi	ko feraa e kaalis	ko dañaa e cōnal	tolno [illegible]uuji jeeyaadi	ko dañaa e kaalis
(Date)	(jours de travail)	(Depense en argent)	sacs recoltes	no de sacs commercial-	argent gagne

Dañal moni kala

(Fiche individuelle)

jettooje (nom) _____ kampaañ (campagne) _____

ñalŋgu	ñaldi gollaadi	ko feraa e kaalis	ko dañaa e cõnal	tolno saakuuji jeeyaadi	ko dañaa e kaalis
(Date)	(jours de travail)	(Depense en argent)	sacs recoltes	no. de sacs commercial-	argent gagne

Individual Accounts Sheet

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insurance fund. Risks become smaller when people can understand more clearly the pattern of past harvests.

How quickly should Accounts be Introduced?

In Senegal we concentrated on a personal account sheet during the first season of post-literacy. It introduced people to the meaning of accounts and helped to relate that meaning to their own experience. Once that meaning was clearly understood the introduction of co-operative accounts became much easier.
During the second season we introduced, in turn, the five different accounts the co-operative would use.

These were:
a cash book
a record of inputs used by individuals
a record of individual subscriptions
a record of repayments by individuals (in kind or in money)
a log book for the motor pump.

The log book was introduced in two stages, firstly using symbols for pump operators who were not yet literate, and eventually using words.

During a special training given to pump operators on the care and maintenance of a motor pump the use of this log book was applied.
At about the same time villagers were encouraged to use accounts to record amounts of money spent on medicines in the dispensary, numbers of children vaccinated in a vaccination campaign, and for the cultivation and marketing of vegetables. During post-literacy classes groups were asked to look at records and make calculations in order to solve problems they were set.
Constant practise helped them to become familiar with the use of accounts, and the keeping of them.

The farmers on the above account have to pay subscriptions of 1,000 FCFA per hectare.
Given the above information calculate how much each of them still has to pay.
We also introduced farmers to the use of a revolving fund, which offered them credit in order to buy inputs. Learning to operate the revolving fund entailed understanding percentages. Co-operatives had to pay a percentage of the amount spent on inputs into an insurance fund, - to guard against possible losses, and another percentage into a sinking fund for the eventual replacement of the motor pump. These payments had to be made, in addition to paying for the inputs, at some time during the season. 10% was set as the amount to be paid into the sinking fund and 3% for the insurance fund. These funds were placed into a bank account where they would gain interest.
Practise exercises used within the course helped prepare them for this.

For example:
A co-operative buys 1500 litres of diesel at 210 FCFA per litre.
What is the total cost?
How much must then be paid into the sinking fund?
How much must be paid into the insurance fund?
What are the total repayments the co-operative must make?
If the co-operative has 200 members, each with the same area of land, how much must each member pay?

The concept of keeping accounts, of making decisions on what to plant and how much to spend on inputs may be new to some members of the co-operative. Management of a revolving fund, of an insurance or a sinking fund and of a bank account will be something most people haven't done before. They will need time to understand the significance of these concepts and to realise

For example:

Individual Subscriptions

Date	Name	Surface	Subscriptions	Subscriptions made	To pay
3/11	Mammadou Sow	1 hectare	1 000 FCFA	800 FCFA	?
4/11	Omar Baldé	2 hectares	2 000 FCFA	2 000 FCFA	?
4/11	Ibrahaim Doukalo	1.5 hectares	1 500 FCFA	300 FCFA	?
5/11	Abdul Sow	1 hectare	1 000 FCFA	700 FCFA	?
5/11	Abdou Diallo	1.5 hectares	?	600 FCFA	?

their value. It may take several years before they can use them easily and correctly, but book-keeping is an important and often essential part of most post-literacy courses. It is the beginning of literacy becoming functional and valuable to the village as a whole.

A successful system of book-keeping, that is well used, depends on a trainer introducing it properly, explaining it clearly, and giving people constant practise in its use

Summary

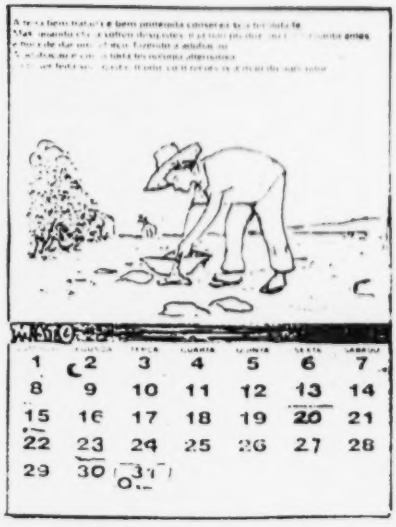
There are many different types of accounts that can be used but a system of book-keeping should be kept as simple as possible.
The areas that need to be accounted for can be broadly divided into three groups,- buying, producing and selling or storing.

In Senegal, - to help people understand the significance of accounts, we began by introducing farmers to a personal account sheet. When they had become familiar with this we introduced, in turn, the five account sheets the co-operative would eventually use. Examples of these can be found in the annex of this book.

Note:
The course used in Senegal to introduce the revolving fund has been printed in booklet form entitled 'Un cours de formation pour le fonds de roulement'. Copies are available on request, and include a booklet for trainers and a set of flash cards.
Some of the above information on the introduction of book-keeping has been taken from research carried out in Oudourou, Matam, Senegal by Guy Belloncle.
Further information can be found in his book 'Participation Paysanne et Amenagements Hydro-agricoles', Karthala, Paris, 1985.

7.7 Creating a Cropping Calendar

One of the most important things a farmer involved in irrigation has to learn, is the best planting and harvesting times for different varieties of crops. Farmer's advisors, agricultural research institutes and extension workers will all have information on what each crop, or crop variety needs to grow well.
To help local people understand and use this information, some projects have experimented with producing a cropping calendar. A cropping calendar, like any calendar, is divided into twelve months. Each month is given a table, marked off into sections or squares, to represent the number of days. The days are numbered with a date, and



1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

A page for the month of May from a Cropping Calendar produced in Latin America.

feast days and the phases of the moon are marked on them. The calendar can then be used for agricultural information.
Within a post-literacy course students who have learned to read can create, for their village, its own cropping calendar. Information can be collected from agricultural advisors on the best day for sowing, replanting, fertilising, adding pesticides and harvesting for the different crops grown within the village. This information can then be marked on the calendar next to the appropriate days.
Everyone from the village can be involved, in drawing out the calendar, in naming the days and the feast days and in collecting and compiling the relevant information. Illustrations can be added for each month, showing some of the most important activities that take place during the month. These will also act as a reminder for people who are not yet able to read well.

Phases of the moon should also be clearly marked with a crescent, for people who determine the calendar by the moon rather than by the date. Extra agricultural details or instructions can be included on the back of the illustrations. Some of the phrases learned in a literacy class can be used and matched up with the pictures or details they describe. Re-using key phrases is useful revision, extra details can be added to them, and it is a good way of making important information available at the right time.
Dates for the repayment of loans and subscriptions can also be added to the calendar, to remind co-operative members what they have to pay, and when. If the calendar is put together by the villagers themselves it can be made to contain as much, or as little information, as the people will need.

When it is finished it can be photocopied and bound together with a sewn binding (see annex 7: Binding Books), so that everyone can have a copy to keep in their homes.
A calendar created in this way can be used by people who can't read, (who will refer to the pictures), by people who can just read, (who will understand the pictures and the key phrases), as well as by literate students.

Creating a cropping calendar makes a good village project because:
- it involves a lot of people in setting it out, making illustrations, collecting information and reproducing it.
- it supports information given by farmer's advisors and extension workers.
- it makes that information available in people's homes in such a way that it can be understood at several different levels.
- people involved in collecting and organising information will be more likely to remember it than if they were just given that information in a class.
- it is easy to organise and not expensive to reproduce.
- it gives people practice in reading and helps them to incorporate that skill into their lives.

ENDNOTE

In the first chapter of this book we discussed the role of a trainer or field worker in a rural community. Throughout the book we have referred to the importance of responsibilisation, of training farmer's groups to become independent and to understand the issues involved in organisation and management. We have tried to encourage trainers to see themselves not just as teachers, providing information, but as people who have the resources to help others to learn.

But no new innovation, introduced into a traditional community, will go unnoticed, and it is often difficult to forecast what effects even small changes can bring. Irrigation, developments in agricultural production have already created tremendous changes in village structures and relationships, altering the centre of authority and giving different people power. New tasks have been introduced into village life, new people have been chosen to undertake them, and it has meant changes in the way every farmer organises his day.
Increased use of money, credit, banks, and greater possibilities for production have changed the economic situation of communities. Land rights, traditionally inherited by men or women, have been affected as different areas have been farmed. Women, particularly, have had to reorganise their life styles as new opportunities for paid work arise.

Introducing fertiliser and pesticides, pumping water, damming rivers and increasing the scale on which crops are produced, have, above all, changed the environment, altering the landscape and the soil itself. The wildlife that inhabits the landscape is affected, some of which may have been an important source of food. Trees, a basic source of fuel, have been cut down, and with them the age old remedies found in leaves and grasses have also disappeared.

All too often we expect farmers to change their means of production, their traditional hierarchies, their source of fuel, their basic diet, for something which outsiders consider to be an improvement, and without sufficient thought as to what those changes will mean.

Similarly, encouraging people to learn can create far reaching personal change. Literacy, organised learning will, for many people, be a new skill, and one that may significantly change the way they view themselves.

For all these reasons a trainer should treat carefully, aware of a balance he may be affecting, and conscious that not every change may eventually turn out for the best. His aim should therefore be to put the changes that **do** occur in the hands of the people they will affect most. If people can understand these changes, they will, in the end, be in a better position to affect them. Literacy, post-literacy, and responsibilisation entail giving people a voice in decisions affecting their future and helping to put power back into their hands. Perhaps the best thing we, as trainers, can do, is to help communities to make sense of their own developing world.

We hope this book has been an introduction to some of the ways a trainer can work at village level. But, as we have already stated, experience is a far better teacher than information. Some of the best ideas will be the ones you develop yourselves, working in the field, and the ones you find to be effective. We hope therefore that you will add to this book from your own resources, and pass on to other trainers your own ideas.

Customs and cultures differ from village to village, from country to continent, but communities throughout the world have fought for the right to organise themselves. As literacy trainers, extension workers or teachers we have our own responsibility to help make that possible in the communities in which we work.

A philosopher, living in China several hundred years ago, seemed to speak for us, on He a Morphil, when he wrote:

Go in search of your people,
Love them, live with them,
Plan with them, serve them,
Begin with what they have,
Build on what they know,
But of the best of leaders,
When their task is accomplished,
Their work is done,
The people will say -
'We have done it ourselves'.

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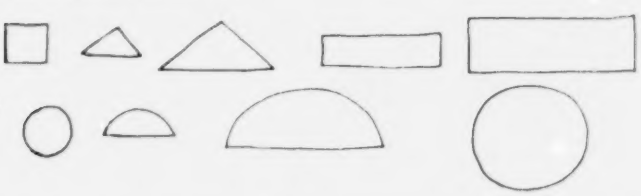
Annex

a. 1 A Short Course in Blackboard Drawing

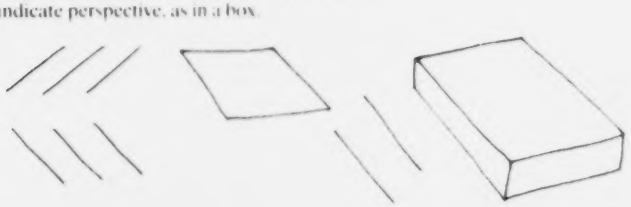
Unlike pictures or flash cards, which can be prepared in advance, blackboard drawings are done in class while the students are present. Therefore they need to be bold, large and confidently drawn, as a lot of time can be wasted in rubbing out shaky lines.
But they do not need to communicate on their own. A trainer can explain his drawing as he builds it up step by step, telling the class what each part represents. Students will not need to recognise an object out of context, as blackboard drawings usually accompany information given by a trainer. As long as drawings are made confidently and [illegible] ough for everyone to see students will accept it as what they are told it is. A blackboard drawing can therefore be more simple than a [illegible] using only a few essential lines.
In order to develop confidence in drawing a trainer needs constant practise, it is a skill that can be developed by looking closely at things and experimenting with different ways of representing them.

1) Begin by drawing lines and curves on the board until you are confident in working with chalk on a large scale.

2) When you are confident with lines- practice shapes, squares, rectangles, circles, half circles and triangles of different sizes.'



3) Practise drawing diagonal lines, and then parallel diagonal lines, make the lines into rectangles by adding horizontal lines. This will indicate perspective, as in a box.



Annex

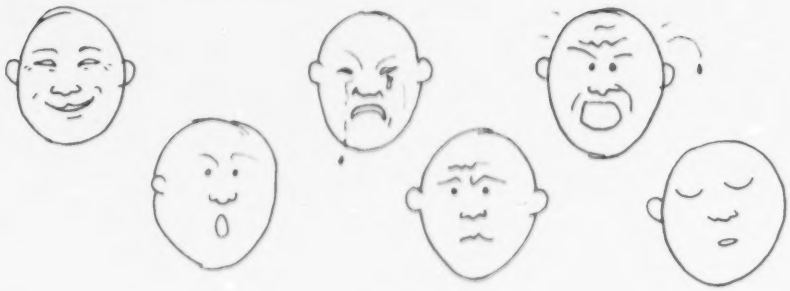
4 Think of the different objects that you could develop from these shapes.
Look at the things around you and try to see them in terms of their basic shapes.

5 Think what extra details can be added to your shapes to help people recognise the objects you are drawing. (take care not to complicate your drawings with too much detail)

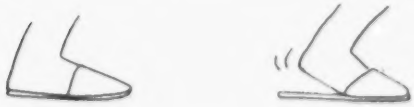
6) People are always much harder to draw than objects, but they are also made from basic shapes.
Start with profiles. Practise the shapes first to get the feel of the size of a head, then try to develop a line that incorporates the forehead, nose and chin. Add the neck, ears and eyes afterwards.

7) Front views can be drawn as an oval. Men can be indicated by adding beards and hats, women by adding earrings and head scarves.
Children's faces are often rounder than adults, older people have thinner faces and more lines.

8) Sometimes you will need to show how a person is feeling, this can be done by the shape of the eyebrows, mouth and eyes, and by adding extra lines to the forehead.
What do you think these people are feeling?

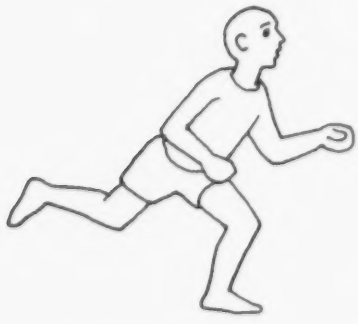


9) Figures can be drawn as stick people but students may find these hard to understand. To make them easier to recognise add clothes. These may be loose robes, trousers, shorts or a wrapping.
Feet, in slip on shoes, are almost a triangle.



A walking figure faces sideways.

10) To indicate movement think carefully about the position of the body, start with a stick figure and then clothe it.



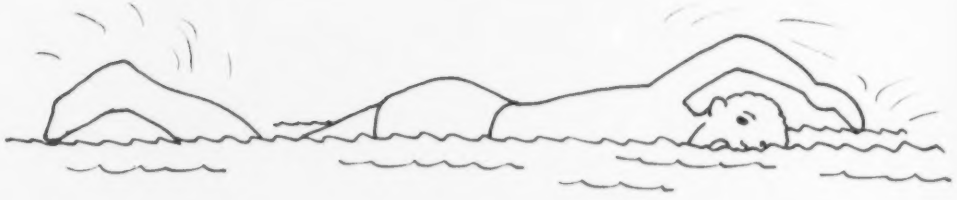
A running figure leans forwards.

Women carrying things on their heads stand very upright.

Often they are carrying babies on their backs.

Both men and women usually bend from the waist when they are working.

A person swimming can only be half seen, their arm usually bends over their head.



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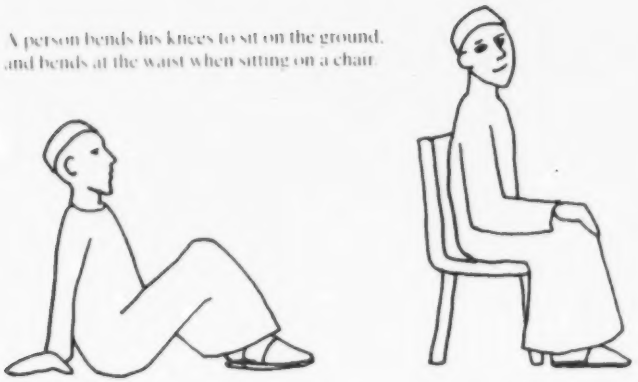
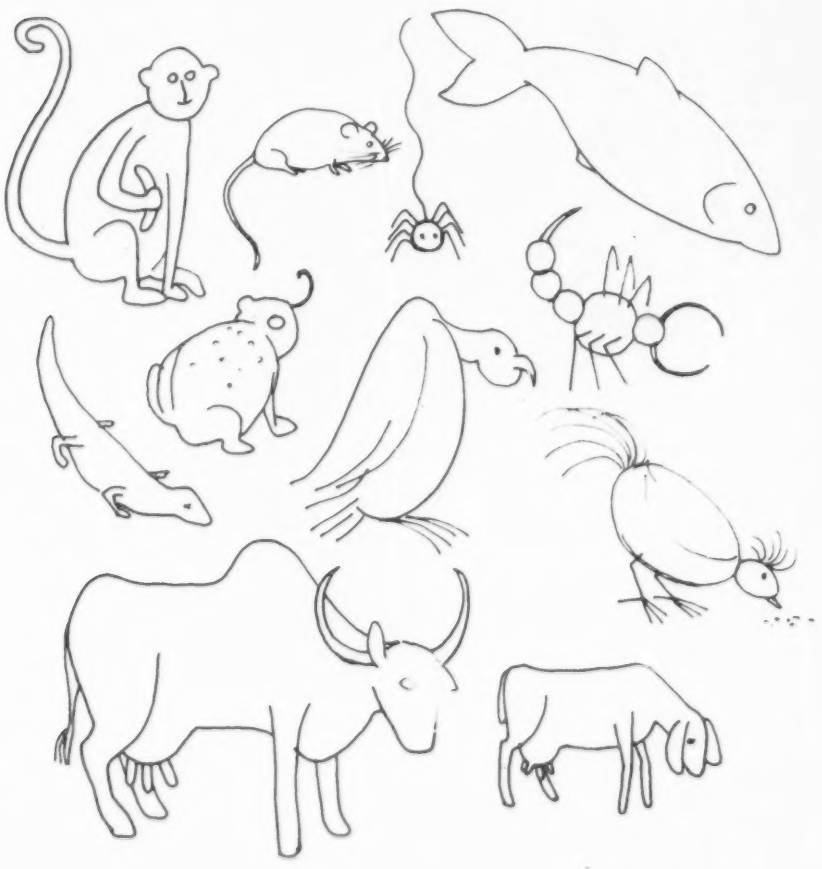
A person bends his knees to sit on the ground, and bends at the waist when sitting on a chair.

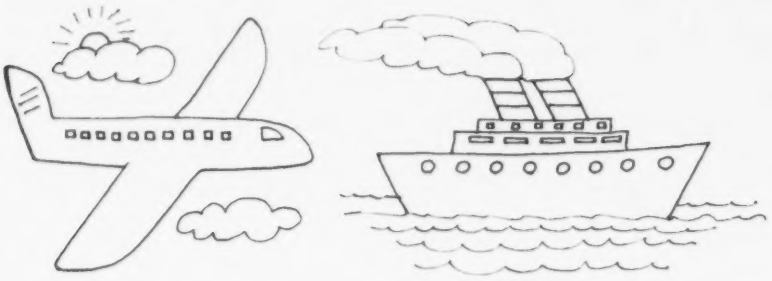


11) Animals - look at the animals around you and decide how to represent them. can you recognise these?



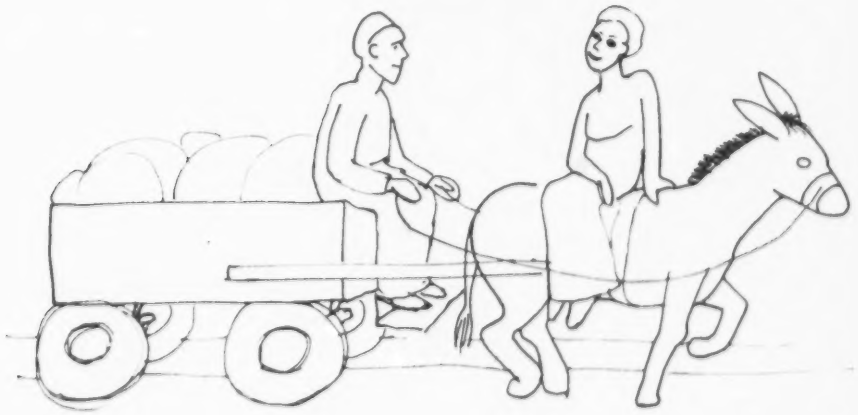
12) Pictures can be used as symbols if you explain to your class what they mean.

A boat or a plane can indicate travel to a different country.



A car or a bush taxi can indicate travel to the city.

A donkey and cart can indicate travel to the next village.



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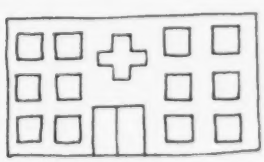
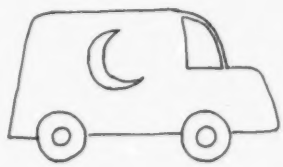
Annex

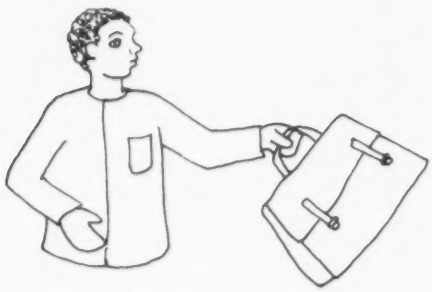
Tall buildings can represent the city.

A cross or crescent can turn buildings into hospitals and cars into ambulances.





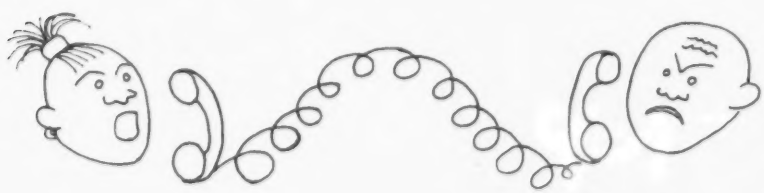
A brief case can be used to indicate a teacher or a field worker.



Glasses can represent an advisor or a government official.

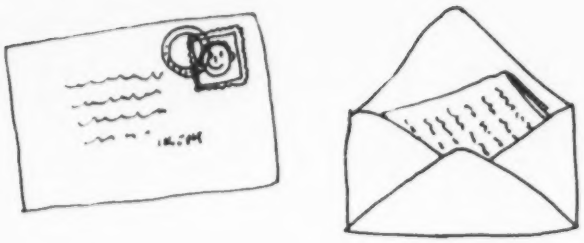
13) Ideas or situations can also be represented by symbols.

Telephones can be drawn with curly wires to represent a dialogue by phone.



Annex

Envelopes can represent a letter.



Notes and coins can represent money or a rich person.

And thought bubbles can be drawn with curly edges to show what someone is thinking or dreaming about.

The most important things to remember are:

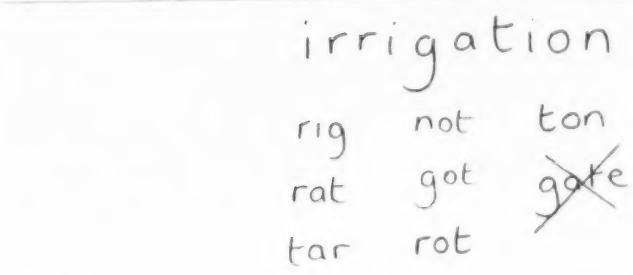
- look at things carefully, and decide what shapes to use;
- decide on ways of drawing different things and practice as often as you can;
- draw quickly and boldly and keep your drawings BIG;
- tell your students what is in your picture, why you have drawn it and what it represents.

a. 2 Games for Literacy

Blackboard Games

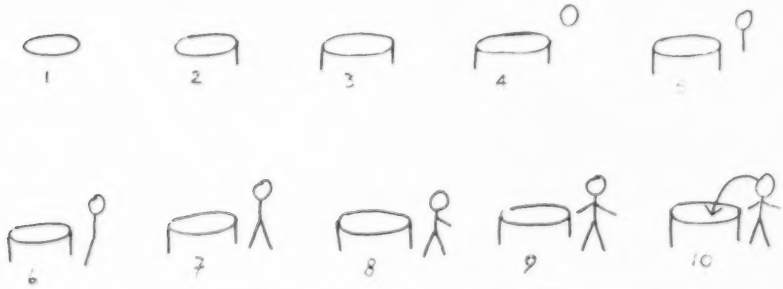
1) MAKING WORDS

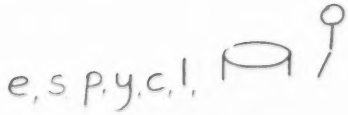
To Play:
Write the longest word you can think of on the board.
Using the letters in the word, ask students to make as many shorter words as they can.
Each shorter word can use only the letters in the long word.
If one letter appears twice in the long word it can be used twice.
If it appears once it can only be used once in each shorter word.
Students can work alone or in groups.
The winner is the group with the most correct words.



2) THE WELL GAME

To Play:
One student thinks of a word.
He writes dashes to represent each letter of the word on the blackboard.
The class have to try and guess what the word is by shouting out the names of letters.
When someone names a letter that is in the word it is written up above the correct dash.
If someone names a letter that is NOT in the word it is written up to one side.
At the same time the student begins to draw a picture of a man beside a well.
Each time a letter NOT in the word is suggested, another line is added to the picture.
The well picture has ten lines. - here they are:





If the picture is completed BEFORE the word is guessed, the man falls into the well, and the student begins again with a new word.
If someone from the class guesses the word they have 'won', and saved the man from falling.
It is then the turn of the guesser to take over at the blackboard.

3 SORTING WORDS

To play:
The letters of a word, or words are written on the board but in the wrong order.
Students have to rearrange them into the correct order.

1. mefarr
2. ldief
3. nva
4. xait
5. kabn
6. menoy
7. eicr
8. ishf
9. nma
10. wmona

4 SORTING SENTENCES

To Play:
The words from a sentence are written on the board, but in the wrong order.
Students have to rearrange them to create the correct sentence.

5 SORTING STORIES

To Play:
The sentence of a story are written on the board in the wrong order.
Students have to read them and rearrange them to make the correct story.
This can also be played using instructions on how to do something.
The instructions are written up in the wrong order and students have to reorganise them into a logical sequence.

All three games can be played alone or in groups.
Letters, words or sentences can be dictated to students instead of writing them on the board. They are dictated in the WRONG order and students have to rearrange them.

6 CROSSWORD

To Play:
This game can be played by the class on the blackboard, or in small groups on paper.
Students take it in turn to write down words.
Each word must join on to other the words on the page.
Words can be joined by going across from another word, or down from it.
Words do not necessarily have to join to the word written by the previous player, they can join ANY word.
Each new word must make sense, letters can not be placed beside each other unless they make a word.
If someone cannot think of a word to add to the cross they are 'out'.
The winner is the last student left playing.

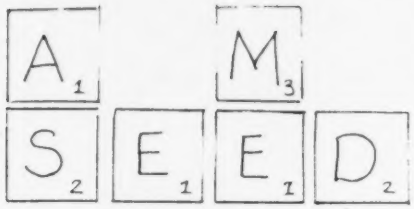
Games to Make

1 LETTER DICE

To make the game:
You will need 24 cubes of wood, 1 sq. cm. (any carpenter should be able to cut them for you), and a calabash to put them in. Sandpaper the edges and corners of the cubes to make them smooth.
A cube has six sides, with 24 cubes you have 144 sides.
On five of your cubes leave one side blank.
On each of the other sides of all the cubes put one letter of the alphabet. (this can be done with a paint brush or a biro).
Use the most common letters (usually vowels) several times.
Use the less common letter only once or twice.
Make sure you have included every letter.
Each letter has a score, the common letters score 1 point, the uncommon letters score 3 points, the others score 2.
Decide on a score for each letter and write it beside the letter on each side of the cubes.

To Play:
Any number of people can play, every player takes a turn. The player places all the dice into the calabash and shakes them, before throwing them out onto the ground.
Using the letters that are on top of the dice, when they fall the player tries to make words.
Words can be made separately or joined in a cross.
The blank face can be used as any letter.
When a player cannot make any more words he adds up the points on the letters he has used.
He then adds up the points on the letters that have not been used and subtracts it from his original score.
The final score is the number that is left.
The winner is the player with the highest final score.

CROSSWORD

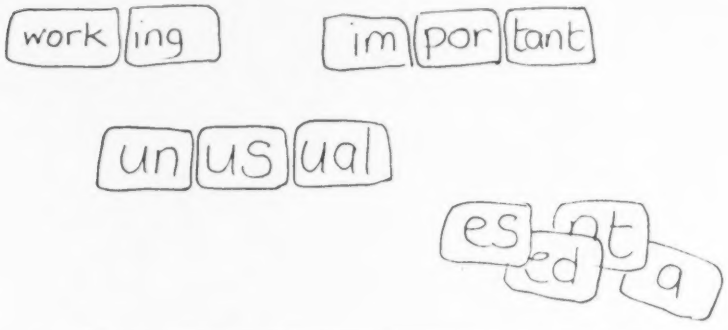


2 SYLLABLE CARDS

To make the game:
You will need 48 pieces of card, approx. 4cm x 6cm.
Write down a list of some of the words your students know and divide them into syllables.
Write one syllable onto each card.

To Play:
Up to eight people can play, (or sixteen people working in pairs).
Ask the players to sit in a circle.
Deal the cards out to the players, they need about six each.
Ask them to use the cards they have to make words.
When they have made a word it should be laid out on the ground beside them.
Every ten seconds each student passes a card clockwise around the circle.
Any card that is unwanted can be passed on.
As each student receives a new card he tries to combine it with cards he has to make words.
The winner is the first player to get rid of all their cards into words.
The timing of the game is important, cards should be passed on every ten seconds, and students have to think fast.

SYLLABLE CARDS



LETTER CARDS

3 LETTER CARDS

To make the game:
You will need about 52 cards, 4cm x 6cm, write one letter on each card, use the vowels twice, and the very common vowels three times.

To Play:
Four people can play, or four groups of two or three in each.
Ask the players to sit in a circle.
Deal seven cards out to each group.
Put the remaining cards in a pile in the centre of the circle, and upturn the top card.
Each player of group uses their letters to make words.
When they have made a word it is laid out for everyone to see.
Each player takes it in turn to add to their remaining cards from the pile in the centre.
They can either take the unseen card from the top of the pack, or the upturned card.

When they have taken a card they can discard a card onto the upturned pack.
With their new card they continue to try to make words.
The winner is the first player or group to get rid of all their cards into words.

a. 3 Games for Numeracy

Blackboard Games

1) KNOWING LARGE NUMBERS

To Play:
Write a single figure on the blackboard, eg: 6
Ask your students to say it aloud, - 'six'.
Add a single figure to the left of it - 16
Ask your students to say it aloud - 'sixteen'.
Add another figure to the left of that - 316 - 'three hundred and sixteen'.
Go on building up your number, getting faster and faster until you have the largest number your students can handle, - 879,630,316.
Ask your students to write it down in letters, - 'eight hundred and seventy nine million, six hundred and thirty thousand, three hundred and sixteen.

2) THE MAGIC SQUARE

To Play:
Draw a square on the blackboard and divide it into nine.
Ask your students to put the figures from 1 - 9 into the squares, so that each line of figures adds up to 15.
Each figure can be used only once.
Every figure from 1 - 9 should be used.
Every line, vertical, horizontal and diagonal MUST add up to 15.

(NOTE - if your students find it difficult, ask them to think of the number in the centre square first.
If they still can't get it, tell them what the centre number is.)

8	1	6
3	5	7
4	9	2

Here is the solution

3) COMPLETING THE SEQUENCE

To Play:
Write down numbers in a sequence on the board.
Ask students to continue the sequence or fill in the gaps.
Here are some examples -

a) 2,4,6,8, ... (10,12,14,16,)
b) 1,-,5,7,-,11,... (3, 9, 15,17,)
c) 1,2,4,8,16,..... (32,64,128,256,)
d) 3,6,-,12,15,.... (9, 18,21,24,)
e) 1,2,4,7,11,..... (16,22,29,36,)

Games to Make

1) THE SERPENT GAME

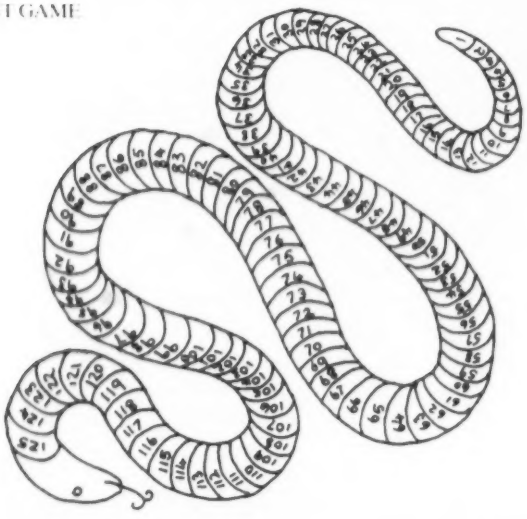
To make the game:
You will need a large piece of card and two dice. (Some dice have dots on each side and some have figures. Using dice with figures gives extra practice in recognising numbers, you can make them yourself from blocks of wood).
Draw a large winding serpent onto the card and divide it into scales. Give him a head at one end and a tail at the other.
Number the scales from one at the tail to 100 (or more) at the head.
Each player needs a bean or a bead.

To Play:
Each player in turn throws the two dice.
The numbers on the dice are added together and the player moves his bead up from the tail according to the numbers thrown.
If a player lands on the same square as someone else the first player is sent back to the beginning.
The winner is the first player to reach the head.
In order to reach the head you must throw the exact number on the dice.

eg.
If a player is on number 92 and throws 6 and 4
6+4=10 92+10=102, and he cannot move.
The player needs to reach 100, therefore he must throw 6+2 or 5+3 or 4+4.

This game can be used to practise multiplication by multiplying the numbers on the dice and moving up the corresponding number of scales.
It can be used to practise subtraction by subtracting the smaller of the two numbers thrown from the larger one, beginning at the head and moving backwards along the serpent.

THE SERPENT GAME



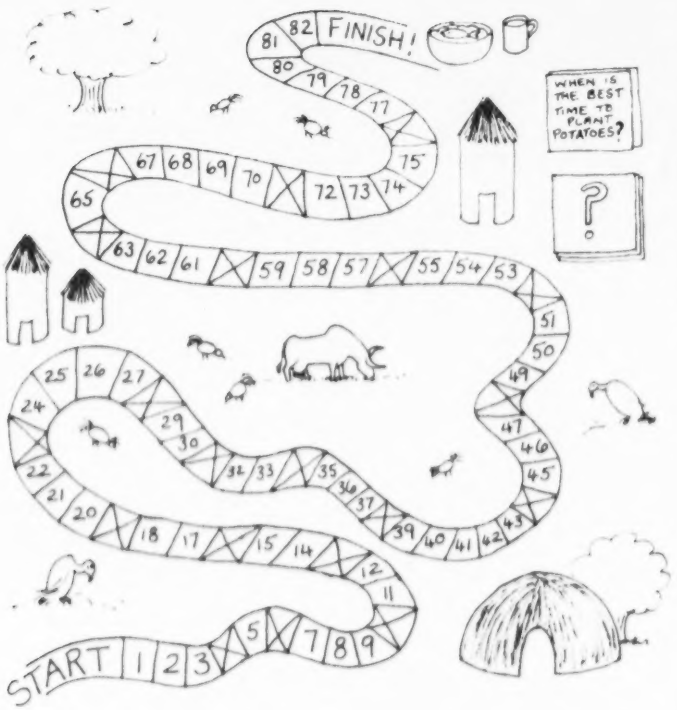
5) BINGO

To make this game you will need a series of cards 6cm x 10cm.
100 small pieces of card with the numbers 1 - 100 written on them. 10 beans for each player.
Divide your cards into 15 even squares.
Blank off 5 squares on each card at random.
Put a number from 1 - 100 (also at random) in each of the other squares.
Your cards will look something like this:

11	8		5	
79		52	93	37
46	21			19

To Play:
Give each player a card and 10 beans.
The caller holds the numbers 1 - 100 in a bag or bowl.
At random the caller takes a number from the bowl and shouts it out.
If a player can find that number on their card they cover it with a bean.
When a player has a line of numbers completely covered with beans they shout out BINGO!.
Their numbers are then checked against those the caller has actually called.
If the numbers are correct the player has won.
(This game can also be played with money, you can decide that a player needs to cover every number on the card to win, to make the game last longer.)
It is a good game for helping people to recognise numbers.

6) THE WINDING ROAD



To make the game you will need:
a board or strong piece of card (50cm x 60cm).
a series of cards (6cm x 10cm).
a dice.
a bean for each player.
On the board draw a long, winding road.
Mark off small sections along the road, (about 200).
Number the other sections from 1 to 200.
Over the top of every 8th section mark a X.
On each of the cards write a problem.
(This game can be made to practise everything from multiplication to general knowledge, depending on the problems written on the cards. These could be 5x12= ? or 'name a cure for conjunctivitis')
The cards are placed in a pile, face down on the board.

To Play:
Any number of people can play.
The player throws the dice and moves along the road.
When someone lands on a square marked with a X they must pick up a card and answer the question on it.
If the player answers the question correctly they wait for their next turn and move on.
If the player answers the question incorrectly, they are sent back to the beginning.
To keep the game interesting the cards should be changed regularly, - different sets of cards can be kept with different sorts of problems.

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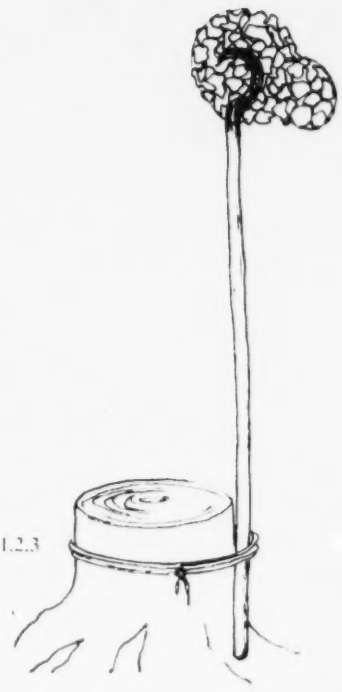
a.4 Instructions for Making a Rod Puppet

Materials:

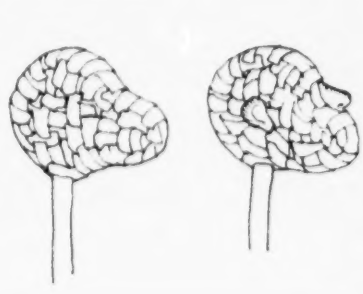
- Chicken wire (about 1 sq. metre)
- 1 strong steel rod (1.5 metres long)
- 1 length plastic pipe (1.25 metres long, 3cm diameter)
- 1 length plastic pipe (40cm long, 3cm diameter)
- 2 flexible steel rods (each 1 meter long)
- Newspaper
- Wood glue
- Strips of cotton
- Rope (2 meters long, 2cm diameter)
- Gloss paint (brown)
- Material for clothes
- False hair, earrings etc.
- A sharp knife.

1. Mould the chicken wire into the basic shape of a head.
2. Fix your strong, centre rod into the base of the head, this can be done by bending the rod and tying it inside the wire head with strips of cloth.
3. Secure the rod to a tree stump or to something firm so you can work on the head.



4. Tear off strips of newspaper and stick them onto the head using wood glue.
For the first layer larger pieces and undiluted glue will be needed to stick to the wire. After that the head can be built up using smaller pieces and glue mixed with water.
(It might be easier to soak strips of paper in a bowl of water with glue added to it)

When the head has a smooth, round shape add a nose and ears, (use your own head to check their position).
Leave the head to dry.



5. Cut a small scoop (about 4cm long) into one side of the shorter length of pipe, exactly in the middle.

6. Cut another scoop the same size into the longer piece of pipe, this time about 6cm from the top.

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7. Join the two cut areas and bind the pipes together in a cross with strips of cloth.

8. When the head is dry it should have a strong, hard surface. Untie your centre rod and push the plastic pipe onto it.
Bend up the end of the rod to secure the pipe and make a handle.

9. Thread the length of rope through the cross piece of the pipe.

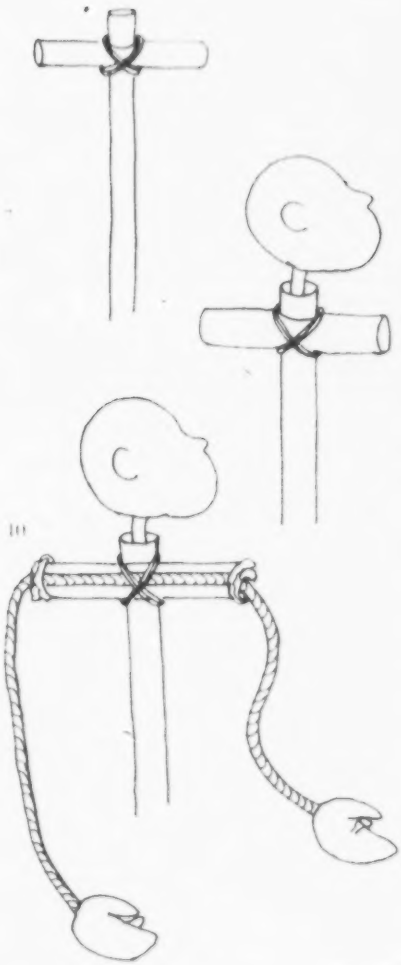
10. Tie strips of cloth around the rope at each end of the pipe. This will stop the rope from slipping through the pipe and form shoulders.

11. Tie a knot at each end of the rope, shape pieces of chicken wire around it to make hands.

11,12

12. Fix a piece of wire in a loop through the centre of the hands, then cover with strips of newspaper and wood glue like the head.

13. When the hands are dry, attach the flexible rods to them by making a loop in the rod and bending the wire loop around it.

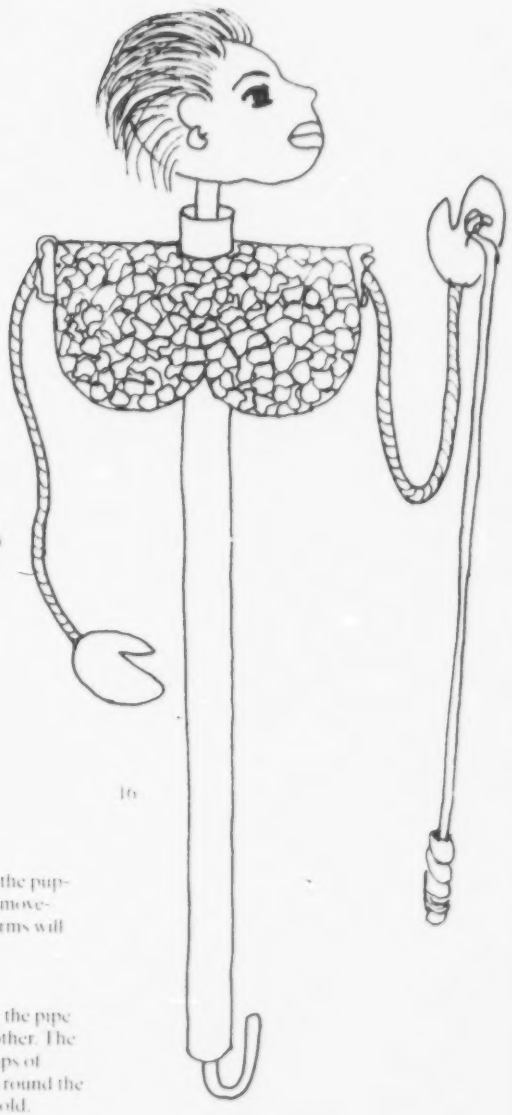


10

14. Your puppet is now ready for painting. Paint the hands and the face. Use false hair for the head and the beard.

For a female puppet breasts can be moulded by shaping a square of chicken wire over the shoulders.

15



16

15. Clothes should be stitched around the puppet and kept loose so as not to restrict movement. Beads, ear-rings and leather charms will help give it character.

16. The head can be turned by holding the pipe in one hand and the centre rod in the other. The hands can be moved with the rods. Strips of cloth, soaked in wood glue and wound round the ends of the rods make them easier to hold.
It is often easier to have two people operating the puppet, one turning the head, the other moving the arms.

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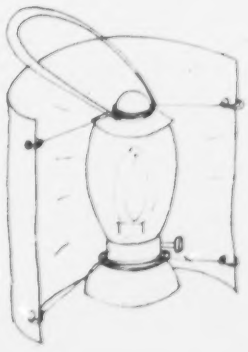
A simple theatre can be made by tying a sheet between two trees, or upright posts.
The sheet should be large enough to hide the people who will need to stand up to operate the puppets.
The puppets will be held up above their heads.

If you are performing at night you can hang lights from the posts. They will need a shield to direct the light in towards the show and away from the audience.
This can be made from a piece of tin.
Fix the tin around the lamp by threading pieces of wire through holes made in it, and winding the wire around the lamp base.



a. 5 Binding Books

1. Glue Binding

Individual sheets of paper, providing they are cleanly cut to exactly the same size, can be bound together using glue.

It is best to use a water-based glue that contains an amount of rubber and stays flexible when it is dry. Spirit glues, or glue made from gum arabic will probably crack.

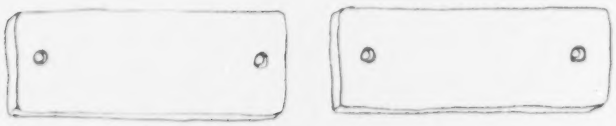
'White glue' or wood glue that can be mixed with water are generally sufficiently strong and easily available.

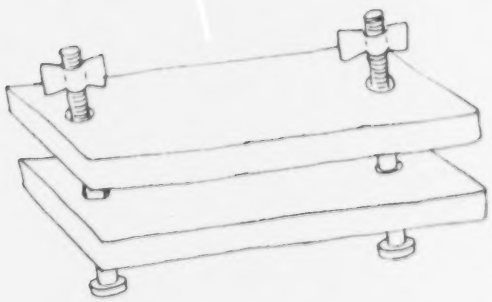
You will also need:

- a small brush to apply the glue
- a bone or the end of a spoon to force the glue into the book,
- strips of loosely woven cotton to strengthen the spine
- stiff paper or card to cover the book
- a simple book press made from two pieces of wood and two large screws.

To make a simple book press

1. Cut two pieces of wood approx. 50cm x 10cm.
2. Drill two holes in each piece of wood at exactly the same point, as shown below.



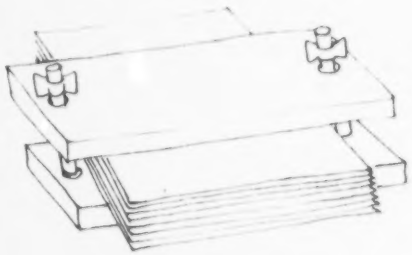


3. Using two large screws, of approx. 12cm long, bolt the two pieces of wood together and secure them with wing nuts, as shown below.

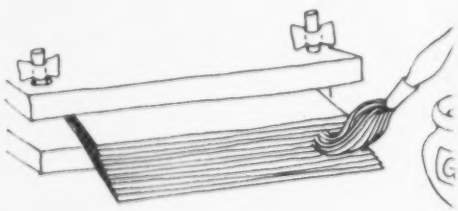
To Bind the Book

1. Stack the single sheets of paper together with the cover sheets at the top and bottom of the pile.
2. Knock all four sides of the pile sharply against a table top or a hard smooth surface to make sure all the sheets are in exactly the same place, as shown below.
3. Loosen the wing nuts to open the press and place the stack between the two pieces of wood
4. Allow the edge that is to be glued to extend 2cm beyond the edge of the wood on the book press, as shown below.

The glued edge is called the spine.



5. Screw the press together.
6. Press down gently on the side of the spine so that the sheets paper in the stack fan out as shown below.



7. Apply the glue with a brush along the edges of the fanned paper.
8. Push the edge upwards in the same way and apply more glue along the bottom edge of the fan.
9. Hold the spine straight between your finger and thumb and force the glue into it by running a bone or the handle of a spoon along the edge.
10. Wipe off any unnecessary glue.

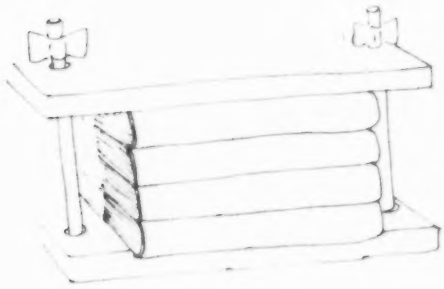
11. Glue the strip of cloth along the spine folding the edges over the sides and pressing them down firmly.

12. Unscrew the book press and gently push the book into it so that the edges of the spine are directly under the two pieces of wood.

13. Screw the press back up again and leave until the glue is dry.

14. When the book is detached from the press a knife may be necessary to free the spine from the wood.

15. Several books can be bound at the same time by stacking them on top of each other under the book press and applying a single piece of cloth as the spine, as shown below.



When the binding is dry the books can be cut apart along the spine using a sharp knife. The spines can then be strengthened with a strip of gummed paper.

2. Sewn Bindings

If a book does not need to be too thick double sheets of paper can be sewn together using a needle and thread.

You will need:
- sheets of paper to form the book
- one sheet of thick paper of the same size to form the cover
- a large needle
- a length of strong thread a bone or the end of a spoon to press the fold.

1. Stack the paper together (using no more than 12 sheets) with the cover sheet at the bottom.

2. Fold the stack in half and press it firmly by running a bone or the handle of a spoon along the fold.

3. Open the stack again and mark five holes, evenly spaced, along the centre fold, as shown below.

4. Push the holes through with a needle.

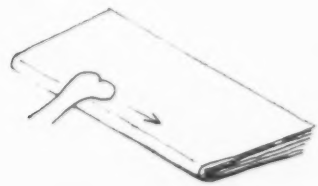
5. Thread your needle with strong thread and tie a knot 5cm from the end. (for a book 25cm long you will need thread 75 cm long).

6. Beginning inside the book at the centre hole sew the book as shown below.

You should finish with both ends at the same place in the middle of your book.

7. Pull the threads tight and tie the ends firmly together.

8. Trim off the ends of the thread and re-fold the book pressing firmly along the fold with a bone.



NB Sew binding can only be used to bind blank sheets of paper into a book. Pages that have already been worked on will need to be bound as single sheets with glue to ensure that they end up in the right place within the book.

a.6 Instructions for Making a Free-standing Flip-Chart

Materials:

- 3 lengths of wood 2cm x 4cm x 2 meters
- 2 lengths of wood 2cm x 4cm x 75cm
- 1 sheet plywood 75cm x 1 meter
- 1 length of rope 1.5 meters long
- 2 bolts with wing nuts 6cm long
- 1 hinge with screws 4cm long
- Nails
- Large sheets of paper

Back View of Flip Chart

Nail one short length of wood across top of ply board, strengthen join with wood glue if available.

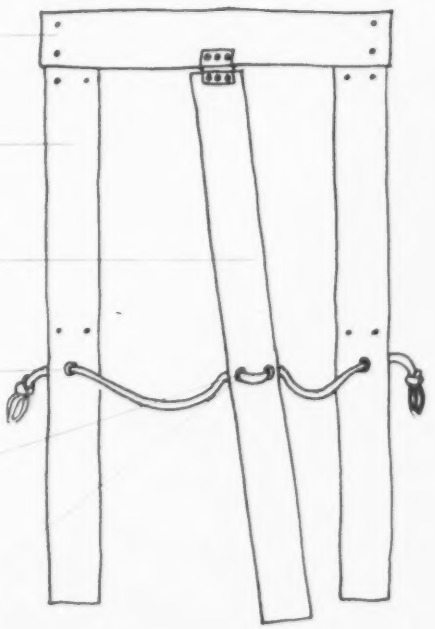
Attach two of the 2 meter lengths of wood to the sides of the ply board, framing the board and creating two 'feet'.

Attach the third 2 meter length to the centre of the horizontal plank with a hinge, creating a third 'foot'.

Drill a hole (1.5cm diameter) in each of the side feet, 3cm below the bottom of the ply board.

Drill 2 similar holes next to each other in the middle of the centre foot.

Knot the end of the rope, thread through the holes in the left foot, in and out of the holes in the centre foot, and back through the right foot. Knot the other end of the rope to keep it in place.



Front View of Flip Chart

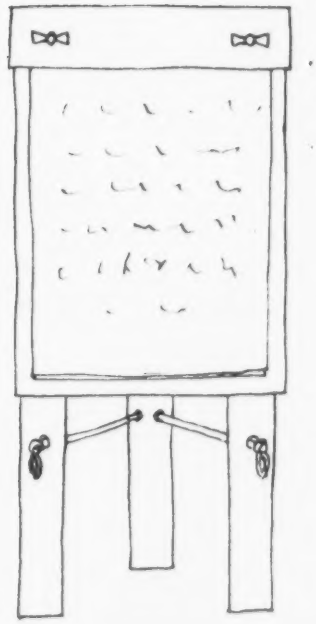
Place the remaining 75 cm
length of wood across the
top of the ply board.

Mark 2 holes, 1.5 cm in diameter and 20 cm
from each side on the top plank and
drill through all three
thicknesses of wood.

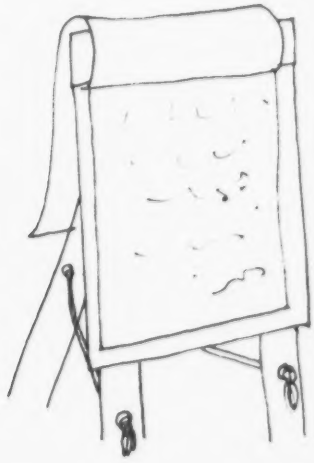
Attach the top plank
to the other two with
bolts and wing nuts.

Fix several large sheets
of paper under the
top length of wood
before screwing down
tightly with wing nuts.

When the centre leg is extended
backwards the flip chart should
stand up on its own.



As each sheet is used
it can be flipped over
to reveal the one underneath.

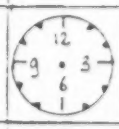


a.7 Examples of Account Sheets used by Farmers in Senegal

Deftere masiŋ ilnoowo

(Carnet de bord du G.M.P)

innde pompist: .....

ñalŋgu		gaaswaal	waktuuji liggaadi	toŋŋgol waktuuji liggaadi	Teskuya
Altine					
Talaata					
Alarba					
Alkamiisa					
Aljumaa					
Aset					
Alet					

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Deftere Piye (Cahier de Cotisation)

Dental ..... Sabaabu ..... Jolal .....
Section Raison Campagne

alŋgu	nɔ e innde e yettoode	mbalndi ŋgesa	ko fawii ŋgesa	ko fiyaa
date	nº et nom du paysan	surface	argent a verser	argent verse

Deftere masiŋ ilnoowo (Carnet de bord de la MP)

ñalŋgu	innde pompist	konfoor waktu		waktuuje ŋgaadi	ŋgoŋgol waxt tuuje ŋgaadi	ŋgaaswaa	wiri	yeres	ŋgoŋtaŋol e jamde laamiiraabe
		waxtuko ñaado	waxtu ñiñaado						
date	nom du conducteur	depart	...	nombre de litres	...	passe	...	...	...

Annex

derewol ñamaande neddo kala

(Etat d'endettement individuel)

dental ..... jolal .....

(Section) (Campagne)

innde demoowo (nom du paysan)	Sabaabu (nature)		Sabaabu		Sabaabu		tonngol (total)	ñamaale booyde (arrerees des campagnes)	tonngol tonngi (total general)
	tolno (quantite)	njaru (valeur)	tolno	njaru	tolno	njaru			
tonngol									

njobdi ñamaale neddo kala

(remboursement individuel)

dental ..... jolal .....

(Section) (campagne)

nuumaro e innde e yettoode (N° Prenom et nom)	n° seede (nombre reçu)	ñalngu (total)	e gawri (en nature)	njaru (en valeur)	e kaalis (en espèces)	tonngol ko yobaa (total remboursement)	ko heddi e yobeede (reste à rembourser)	cellingol (signature)

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Deftere kaalis (Livret de caisse)

Dental (Section) _____ Limre (mb) (Unité) ____

alŋgu	sabaabu e seede	ko naati	ko yalti	ko woodaa	innde jaltir
date	designence et reference	recettes	dépenses	solde	nom du preneur

njobdi ñamaale neddo kala

(remboursement individuel)

dental (Section) _____ jolal (campagne) _____

niimaro e innde e yettoode	nde seede	ñalŋgu	e gawri	njaru	e kaalis	tonŋgol ko yobaa	ko heddi e yobeede	cellingol
N° d'ordre et N° page	(nde reçu)	(total)	(en nature)	(en valeur)	(en espèces)	(total remboursement)	(reste à rembourser)	(signature)